

FIG.1

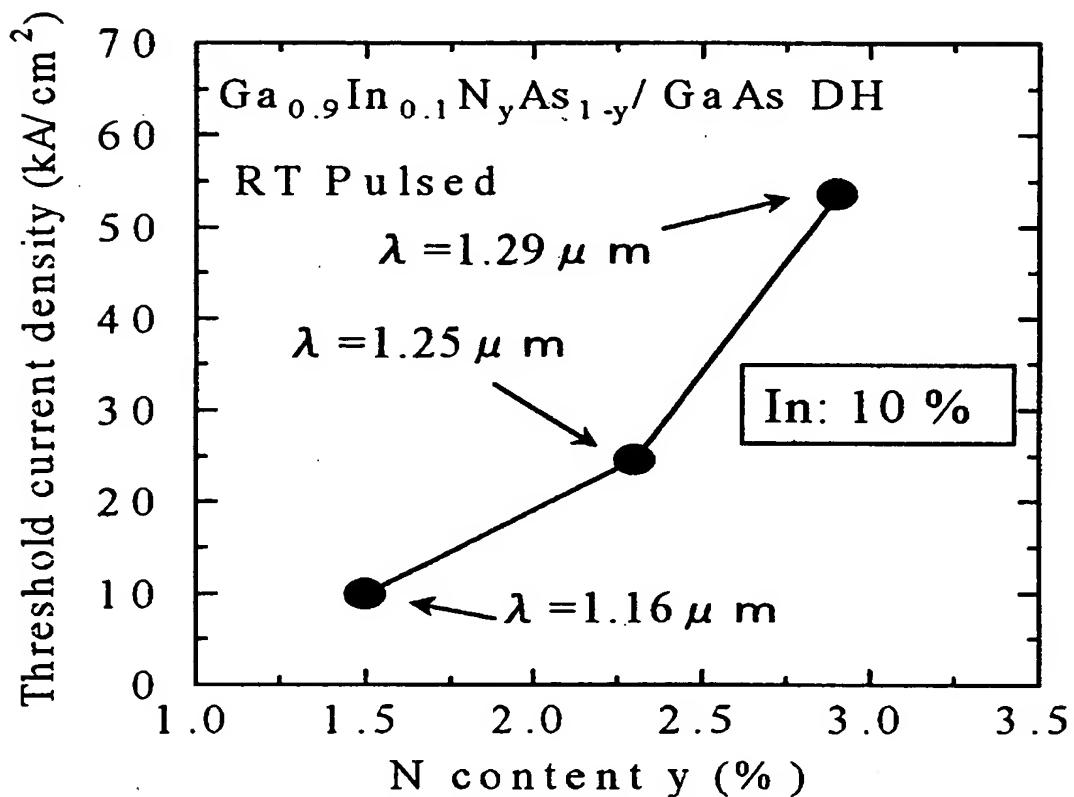


FIG.2

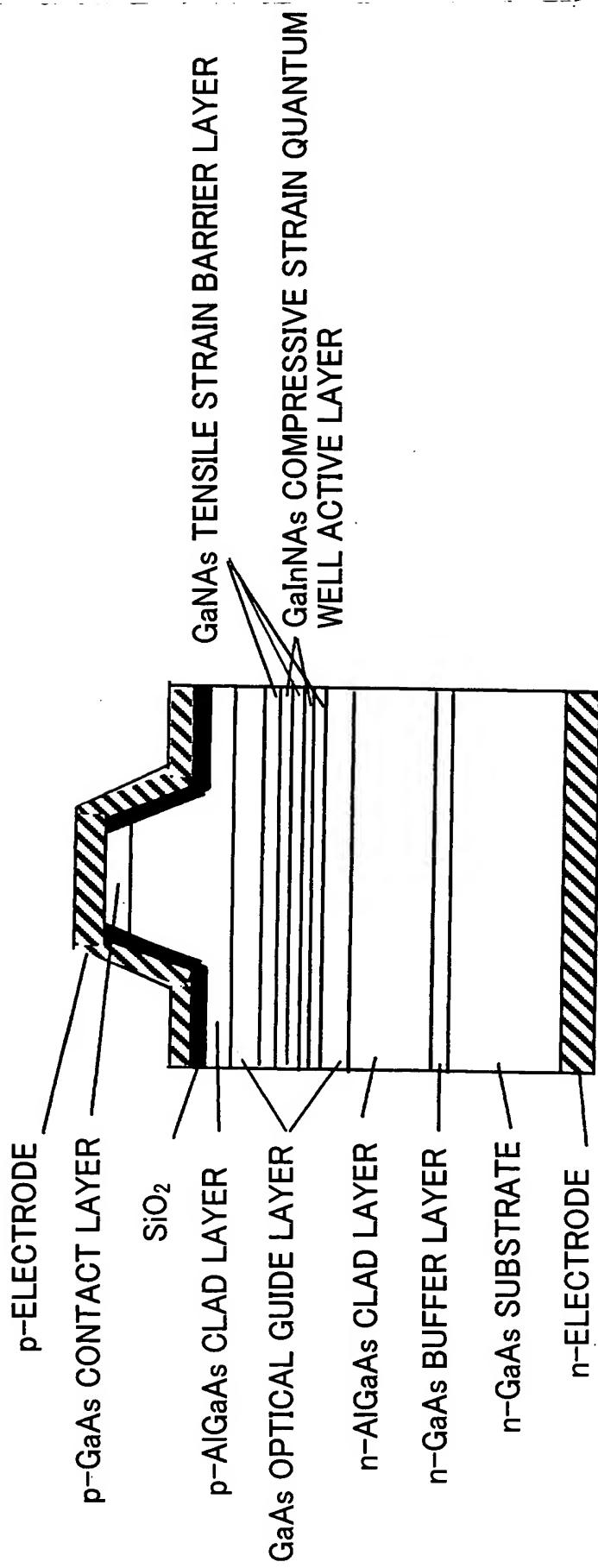


FIG.3

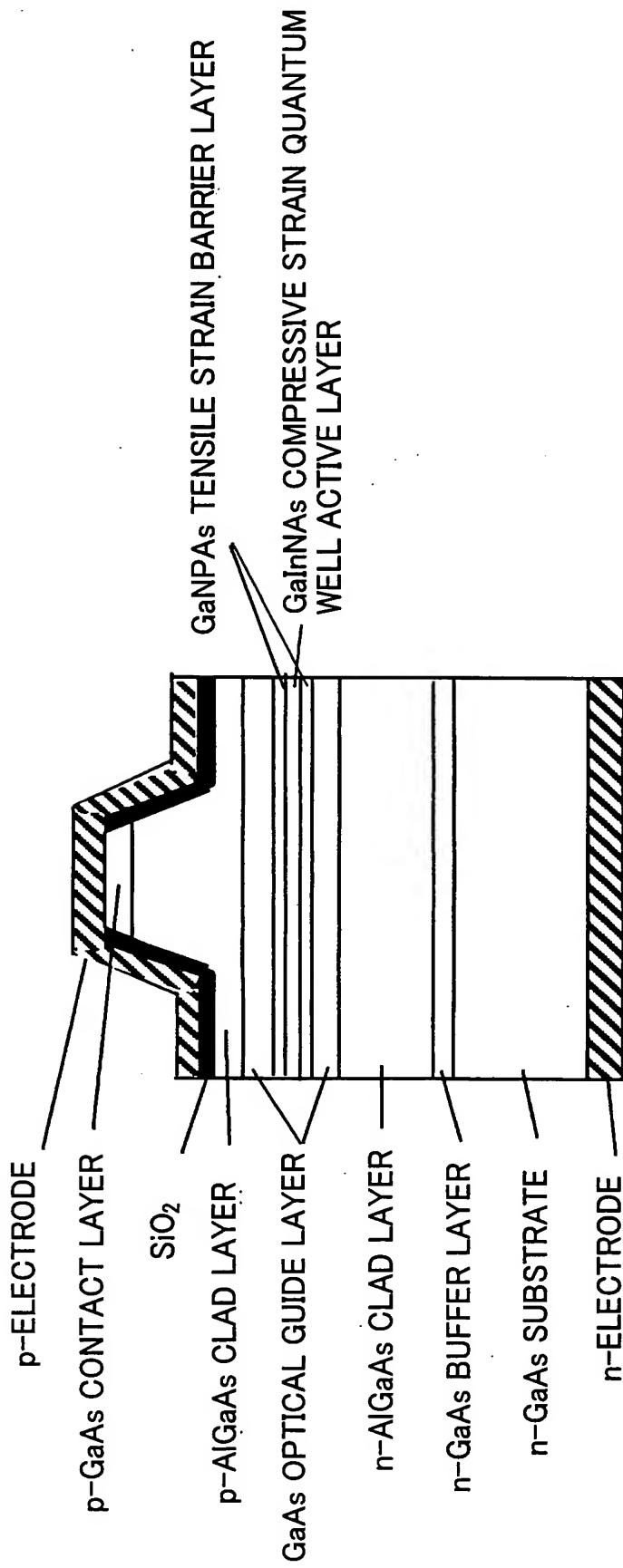


FIG.4

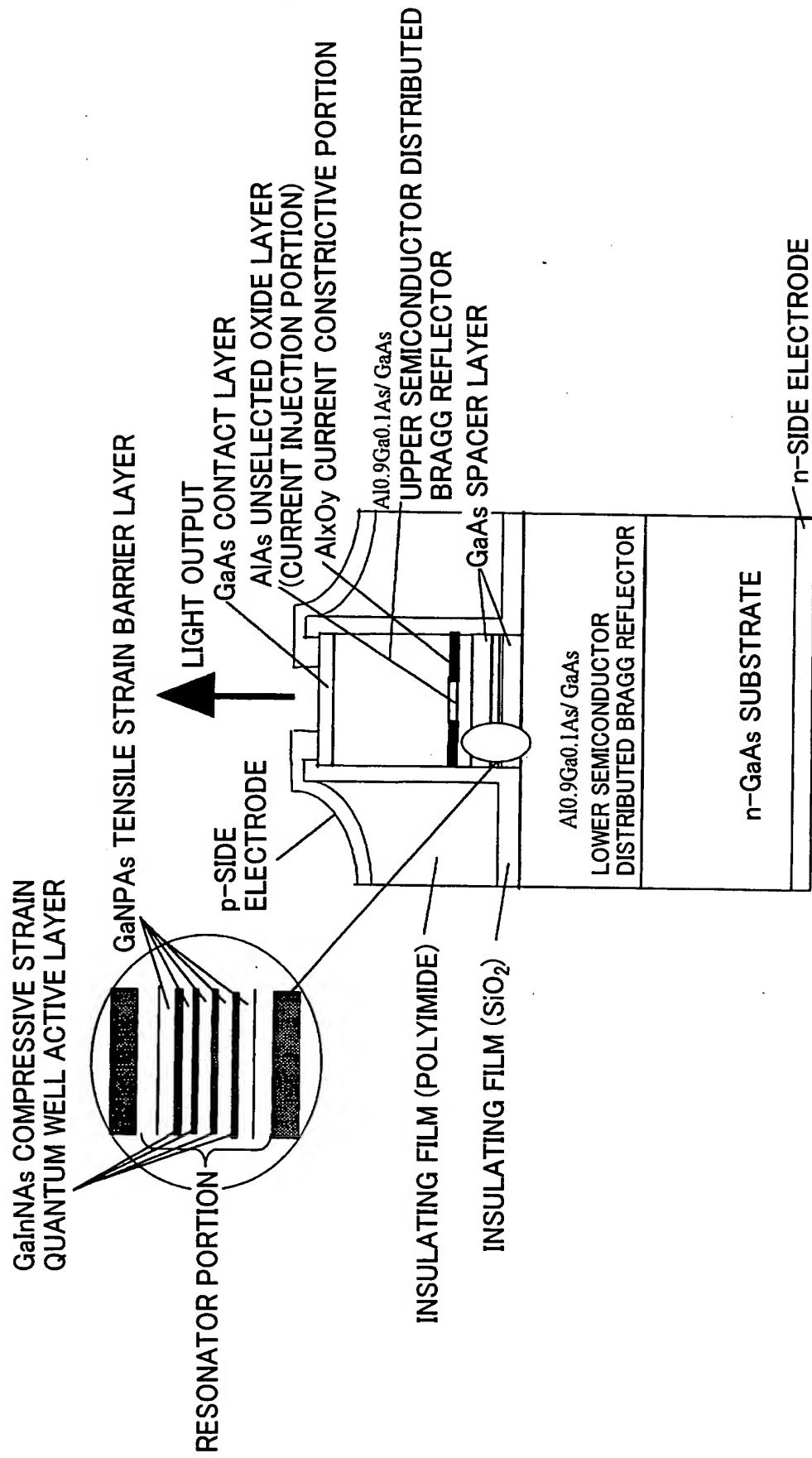


FIG.5

SURFACE EMITTING LASER

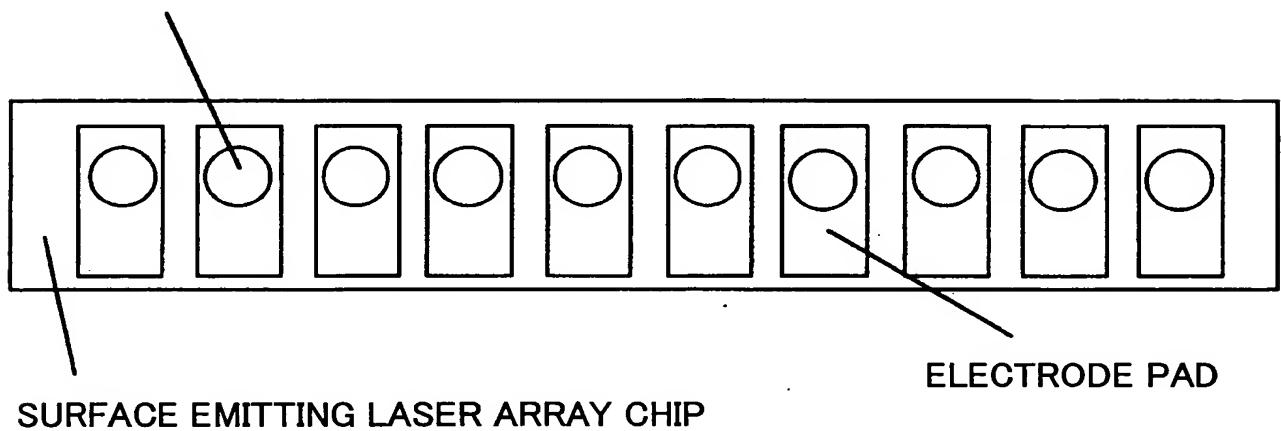


FIG.6

SURFACE EMITTING LASER ARRAY CHIP

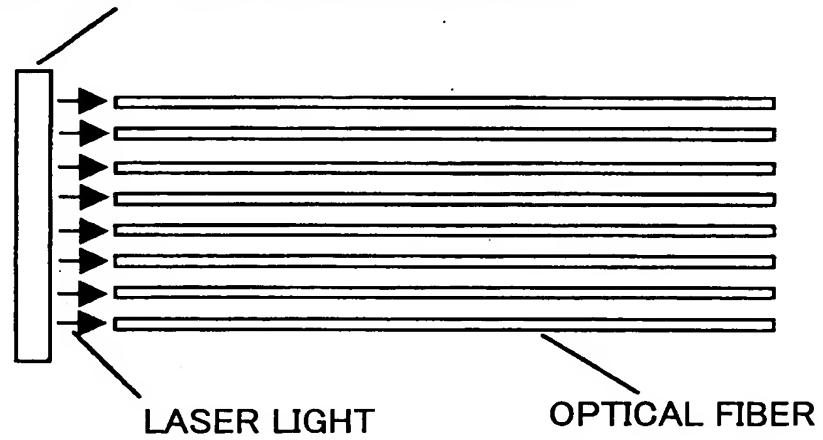


FIG.7

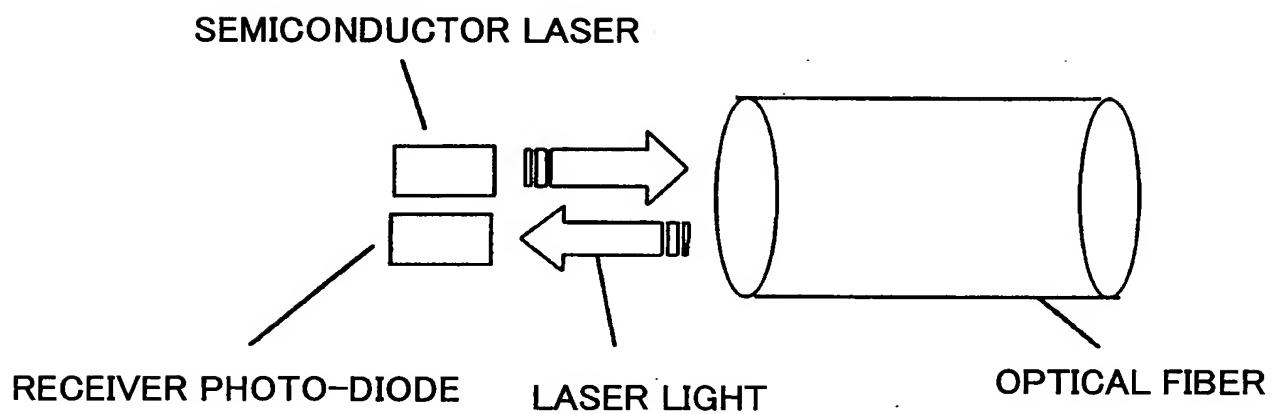


FIG.8

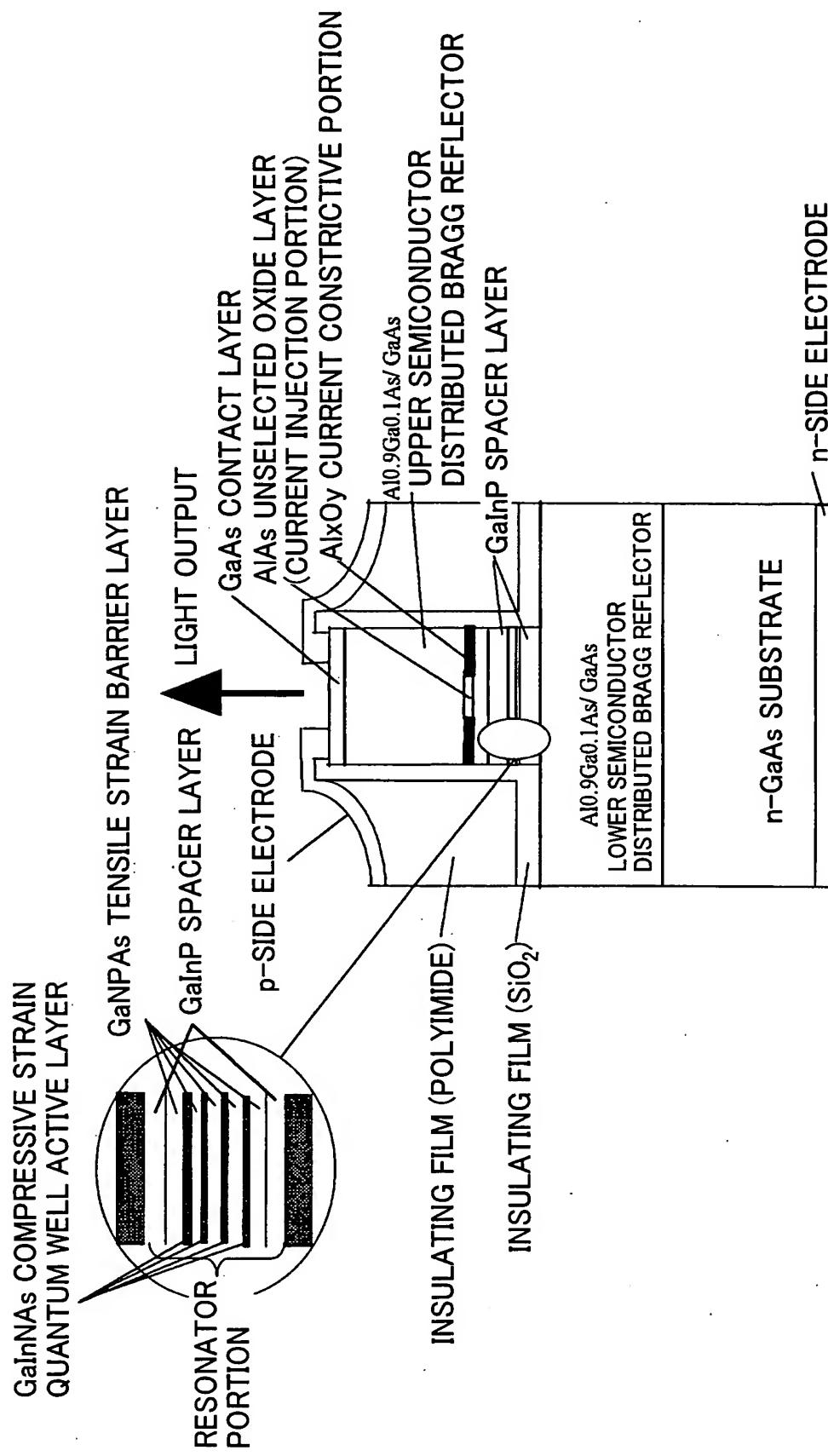


FIG.9

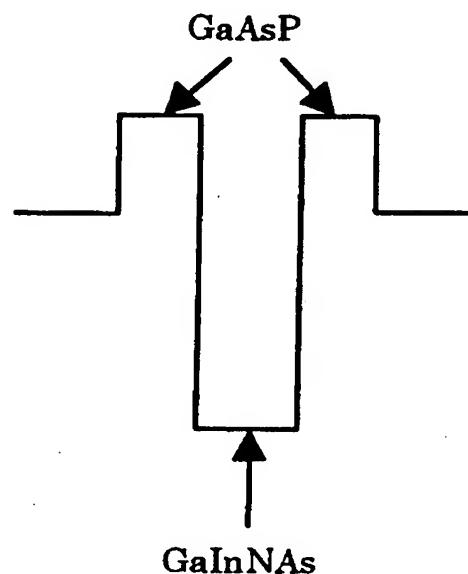


FIG.10

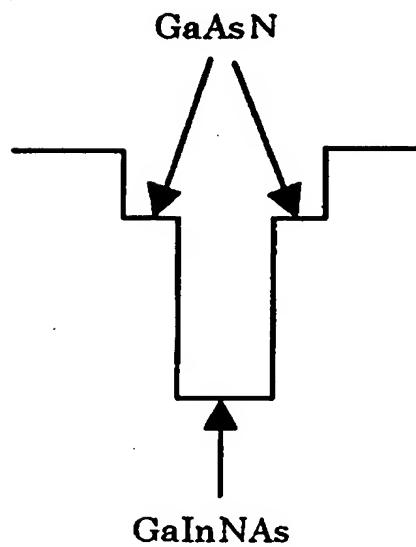


FIG. 11

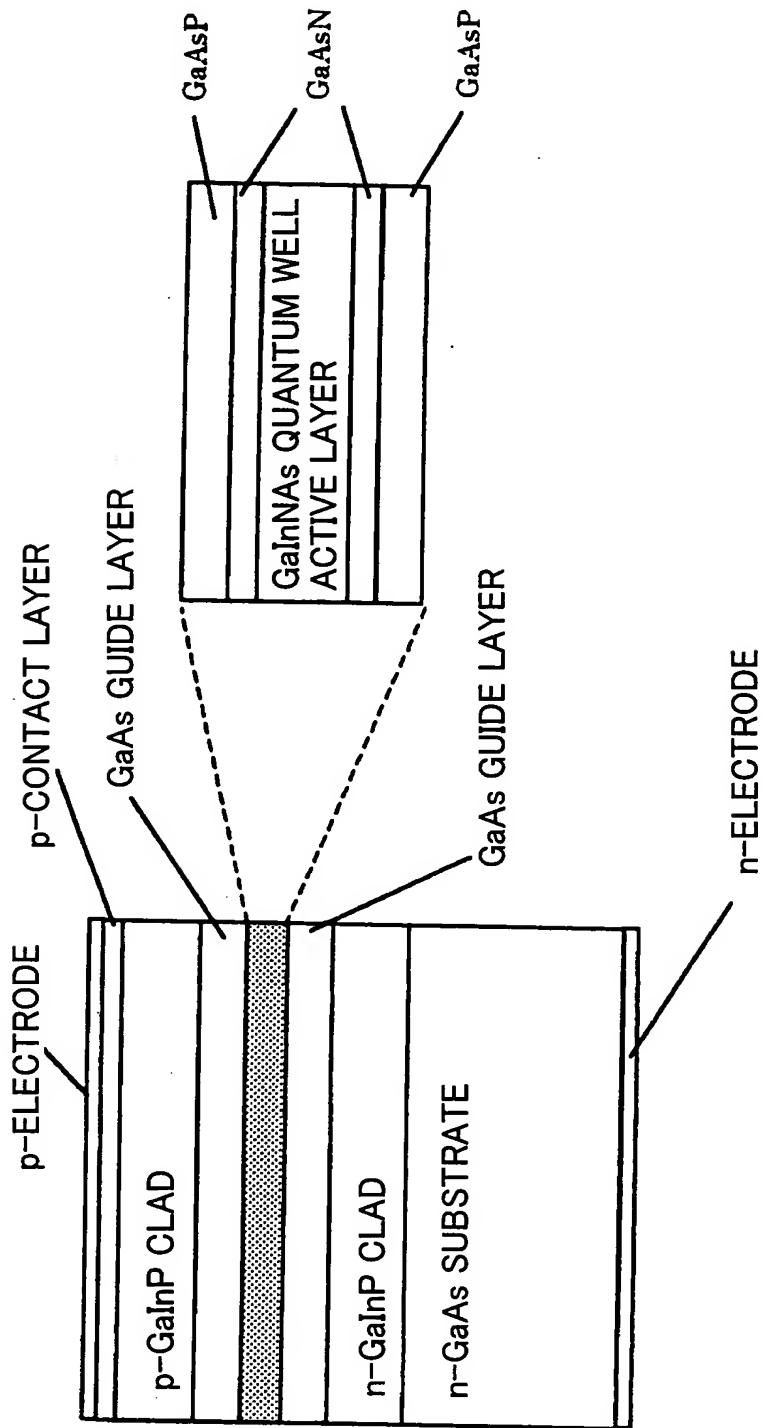


FIG.12

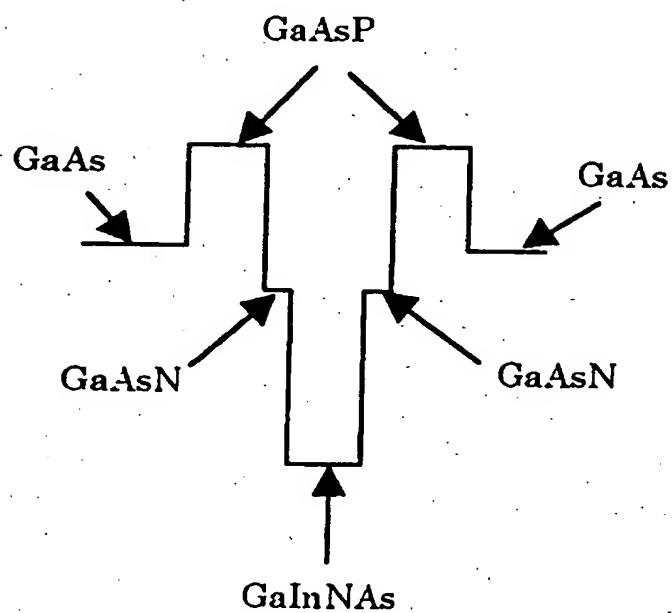


FIG.13

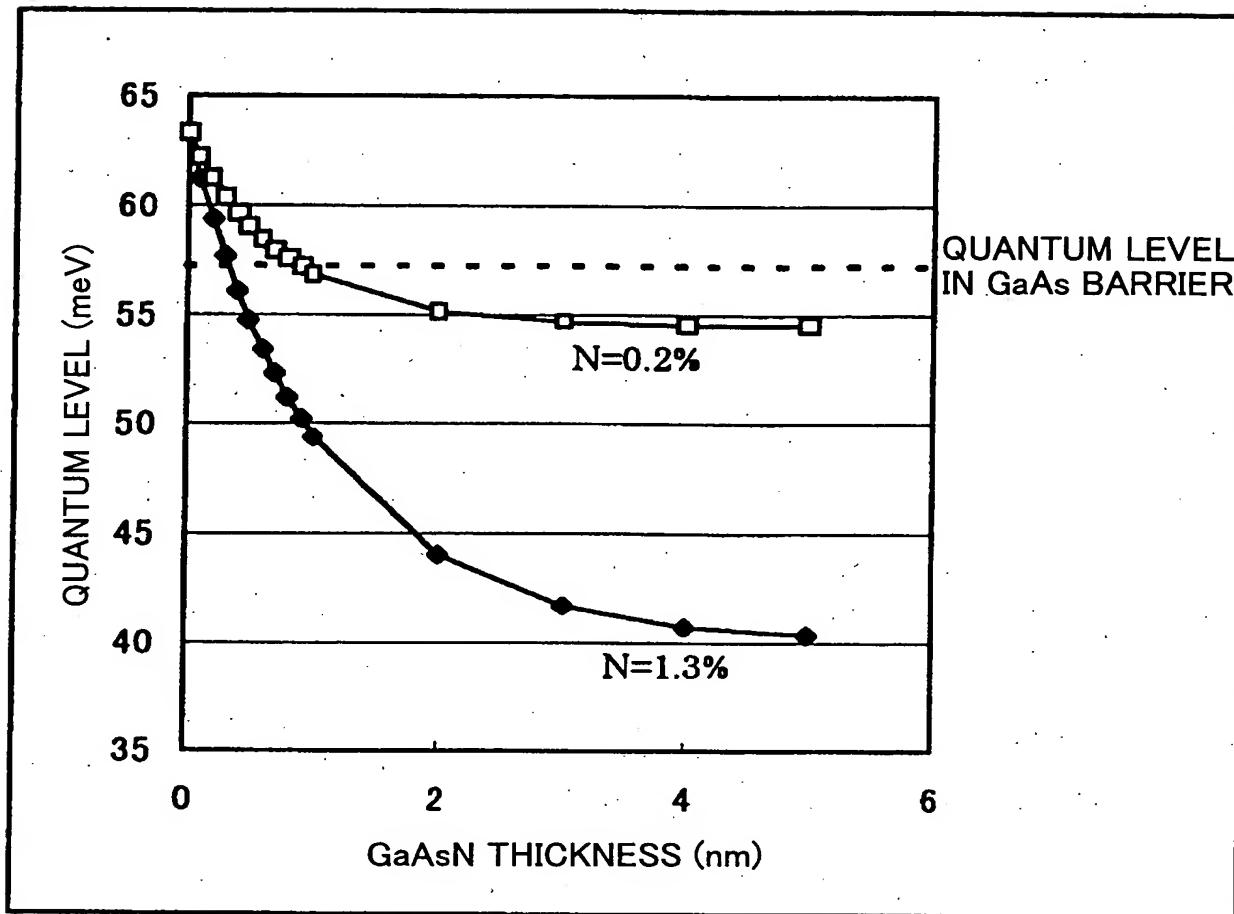


FIG.14

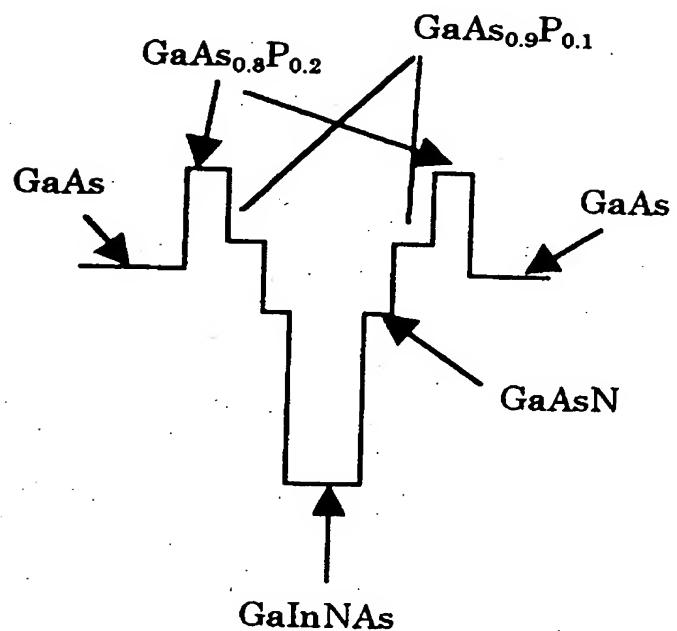


FIG.15

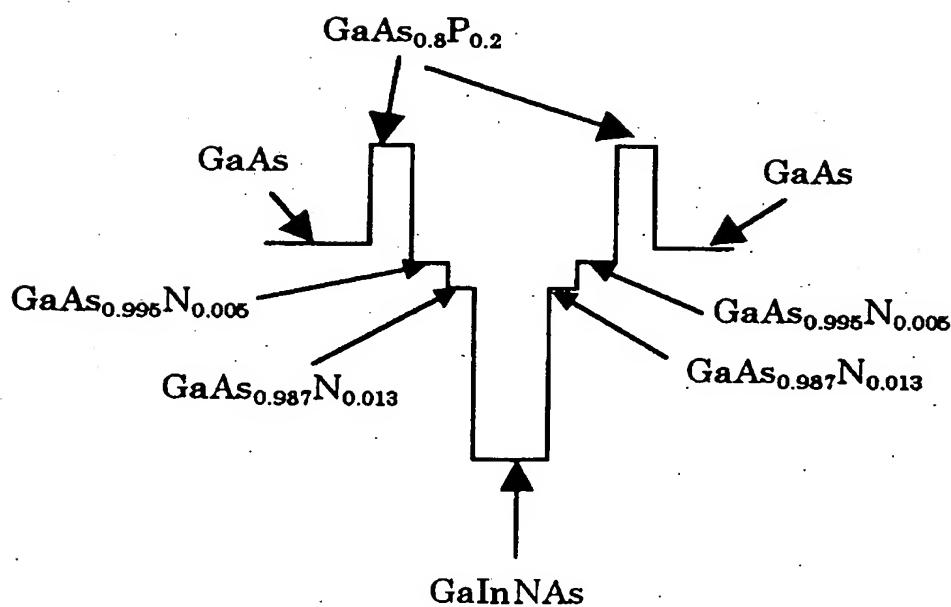


FIG.16

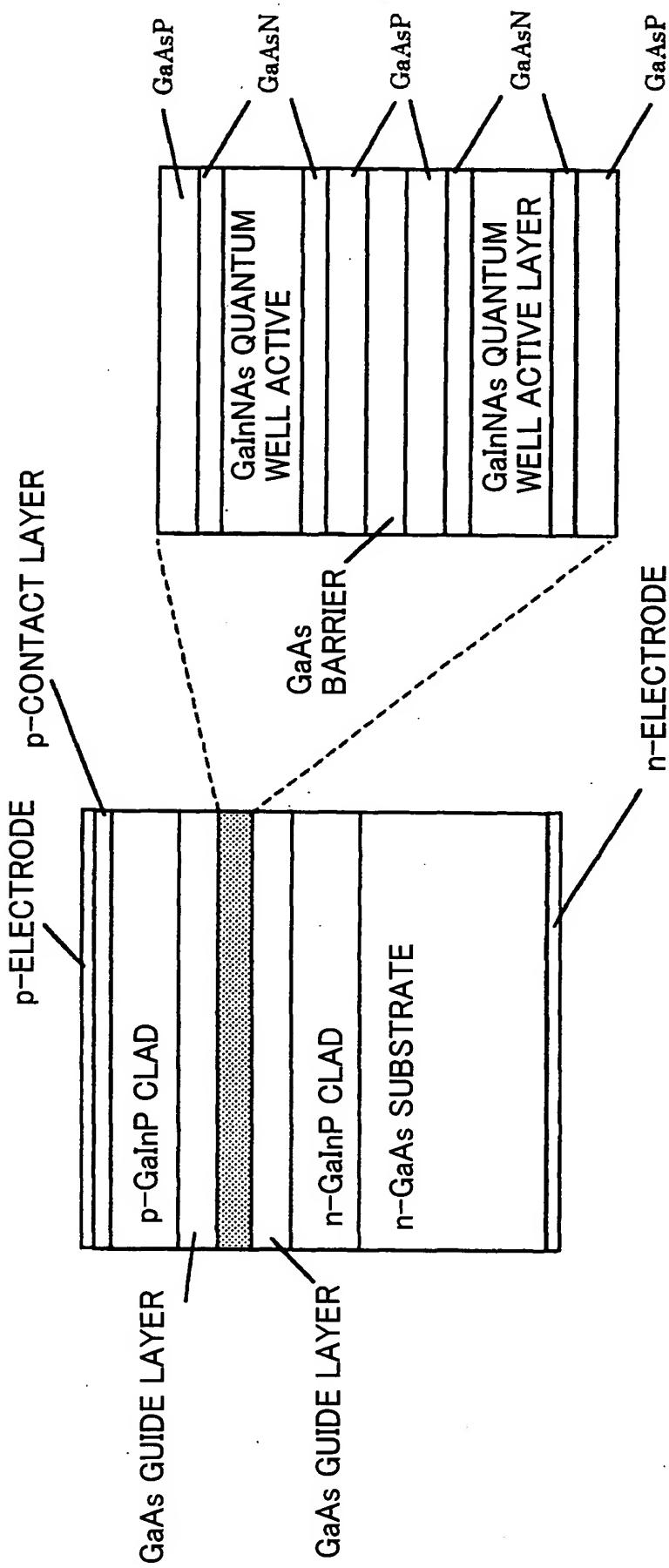


FIG.17

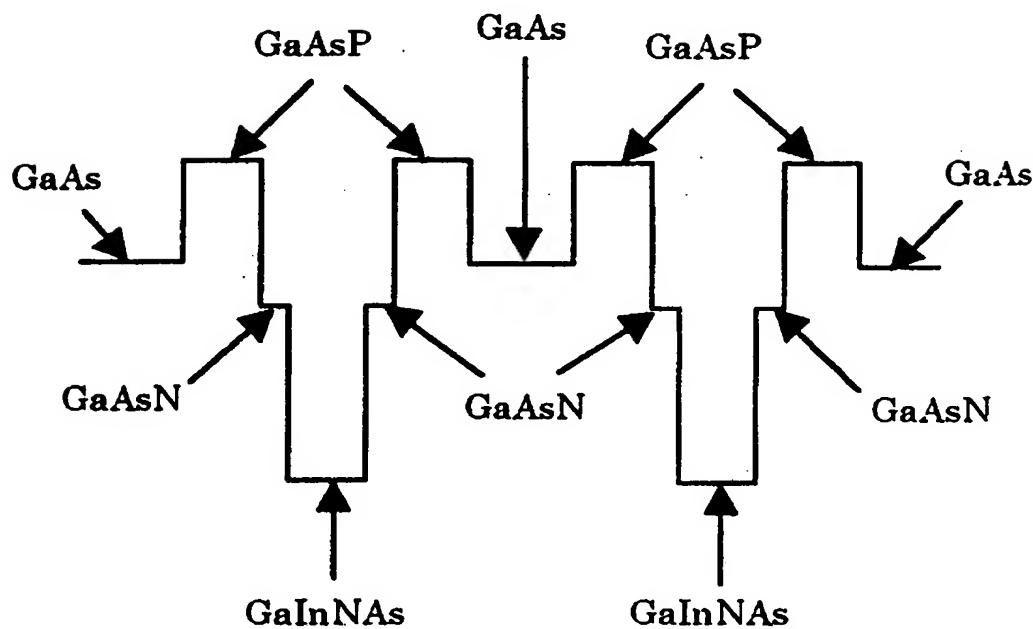


FIG.18

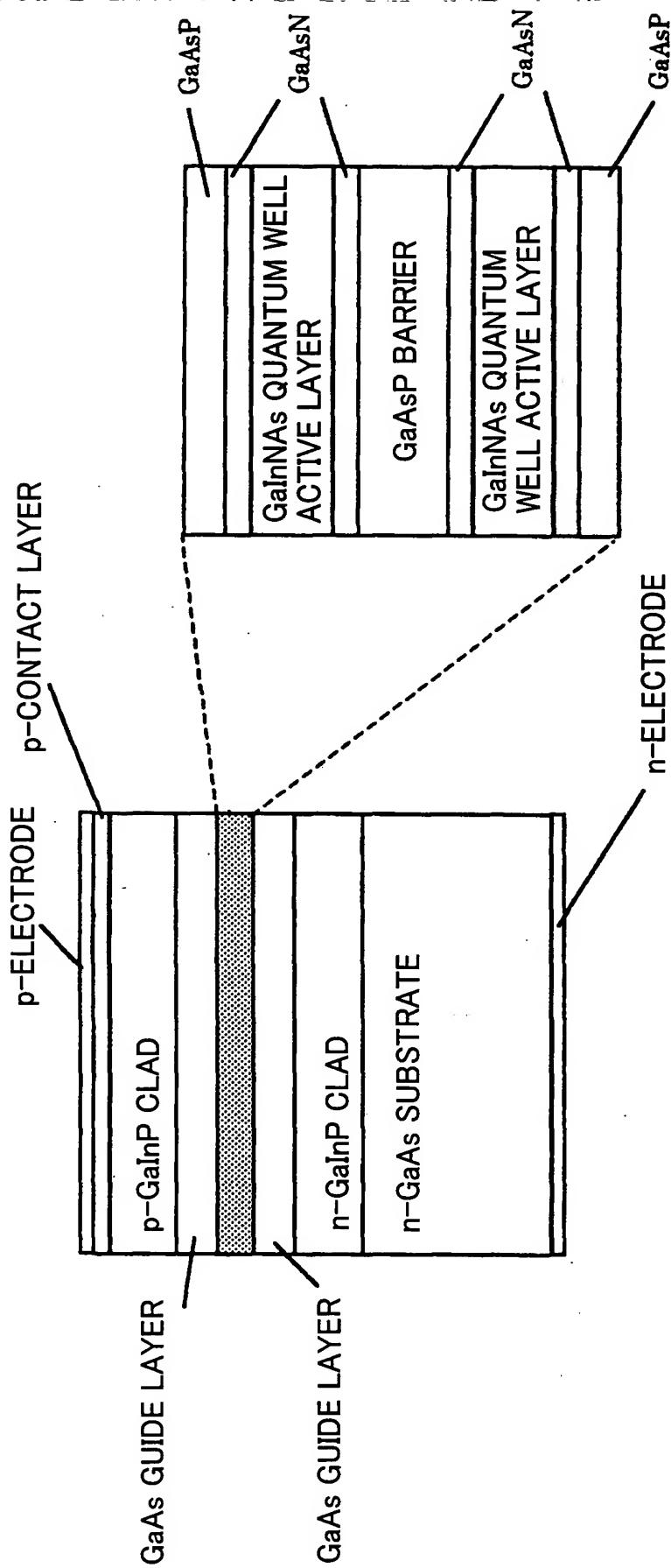


FIG.19

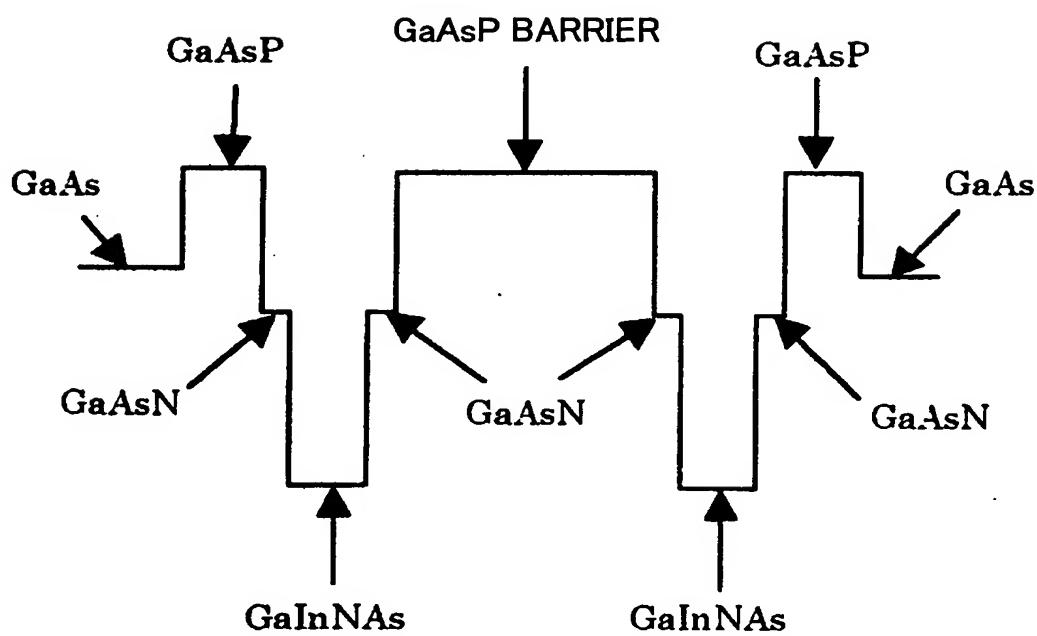


FIG.20

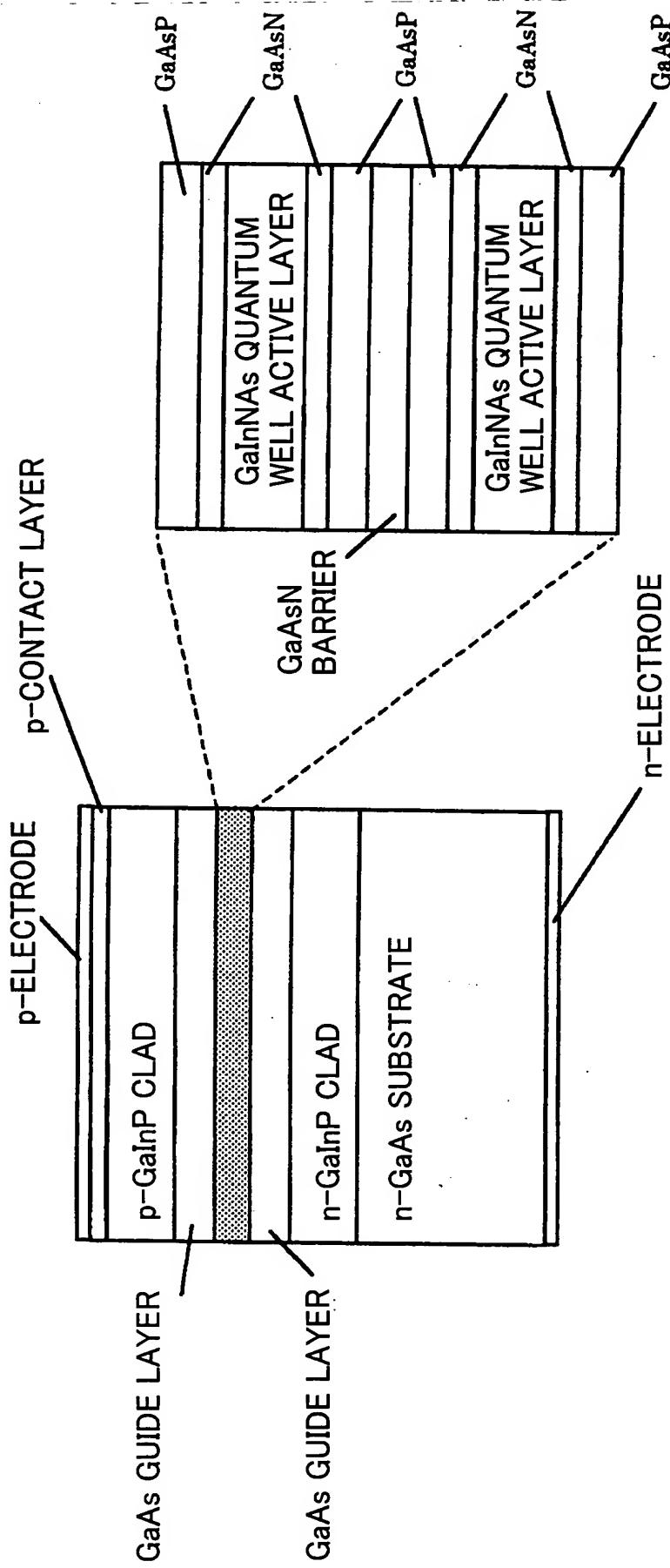


FIG.21

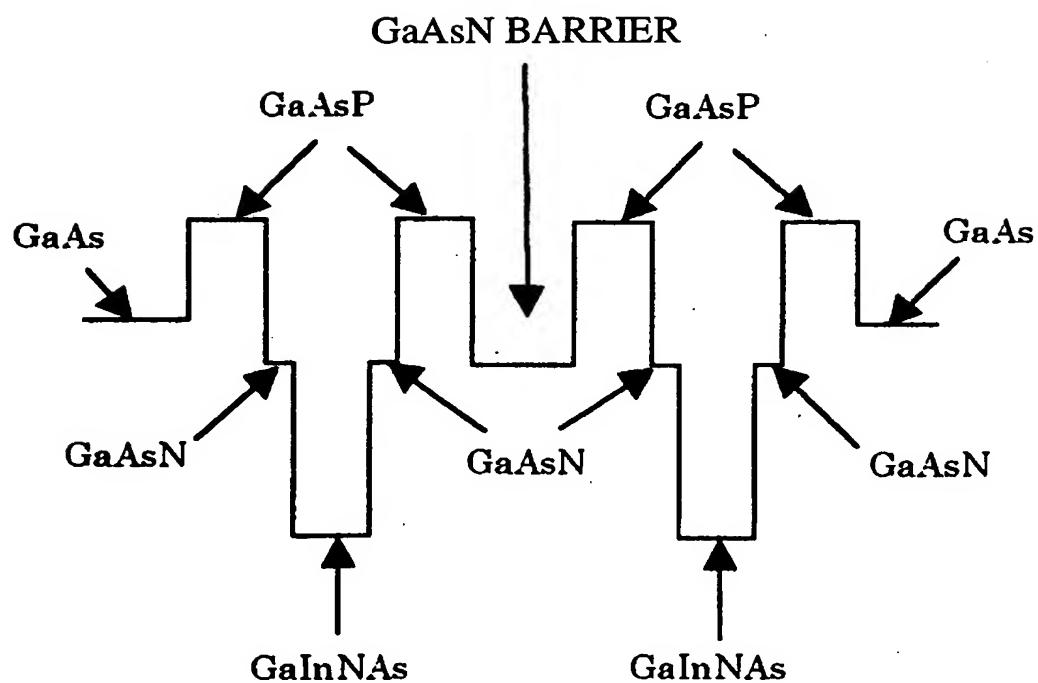


FIG.22

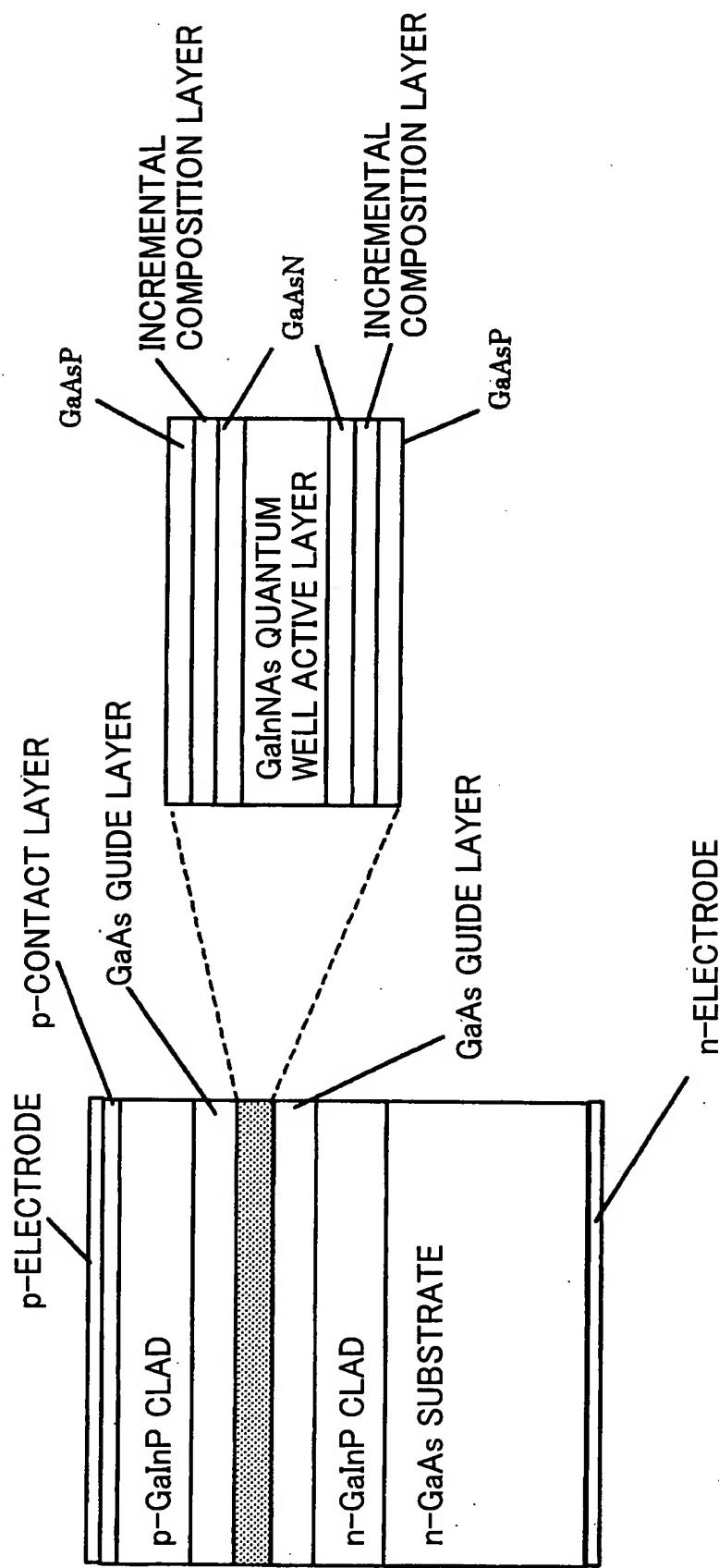


FIG.23

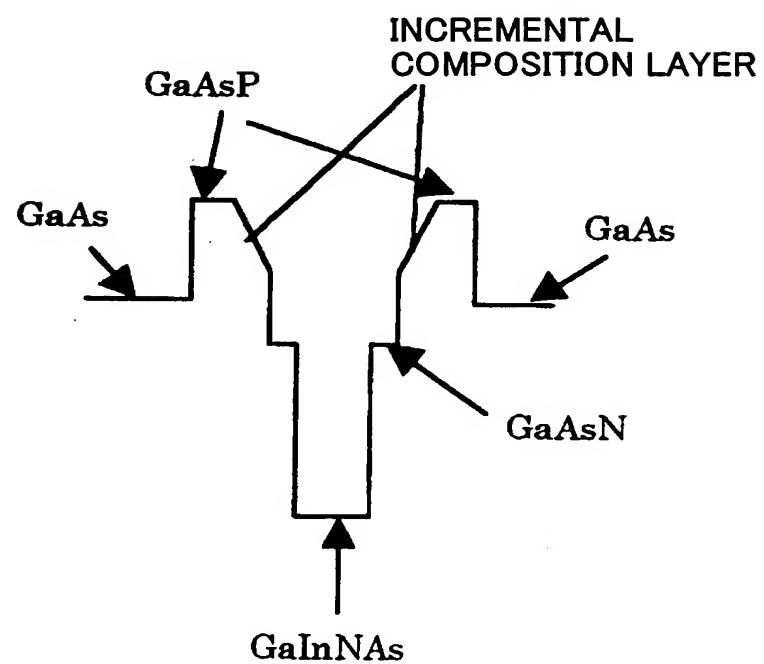


FIG.24

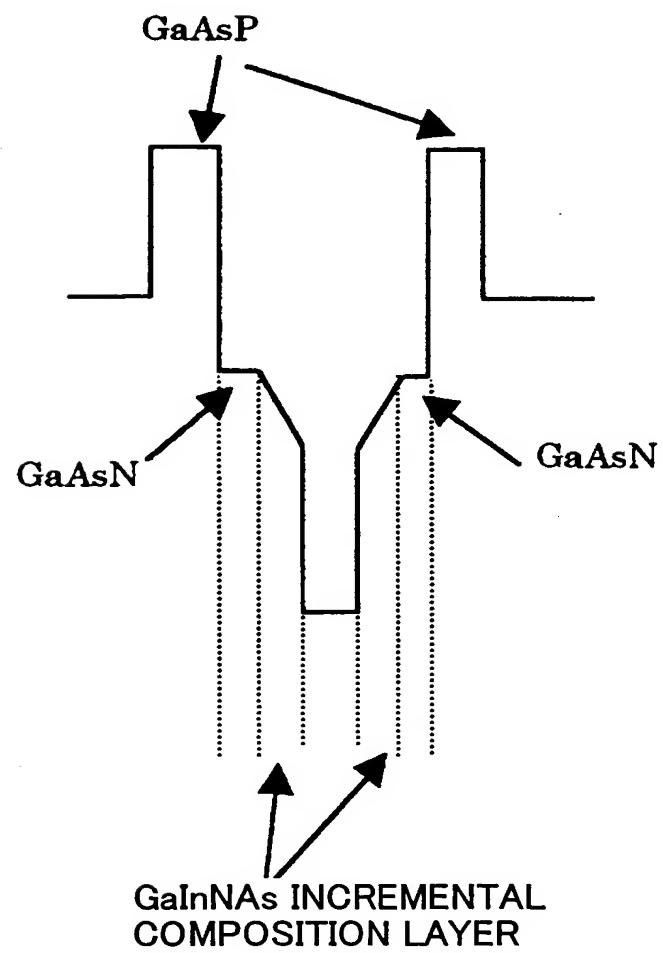


FIG. 25

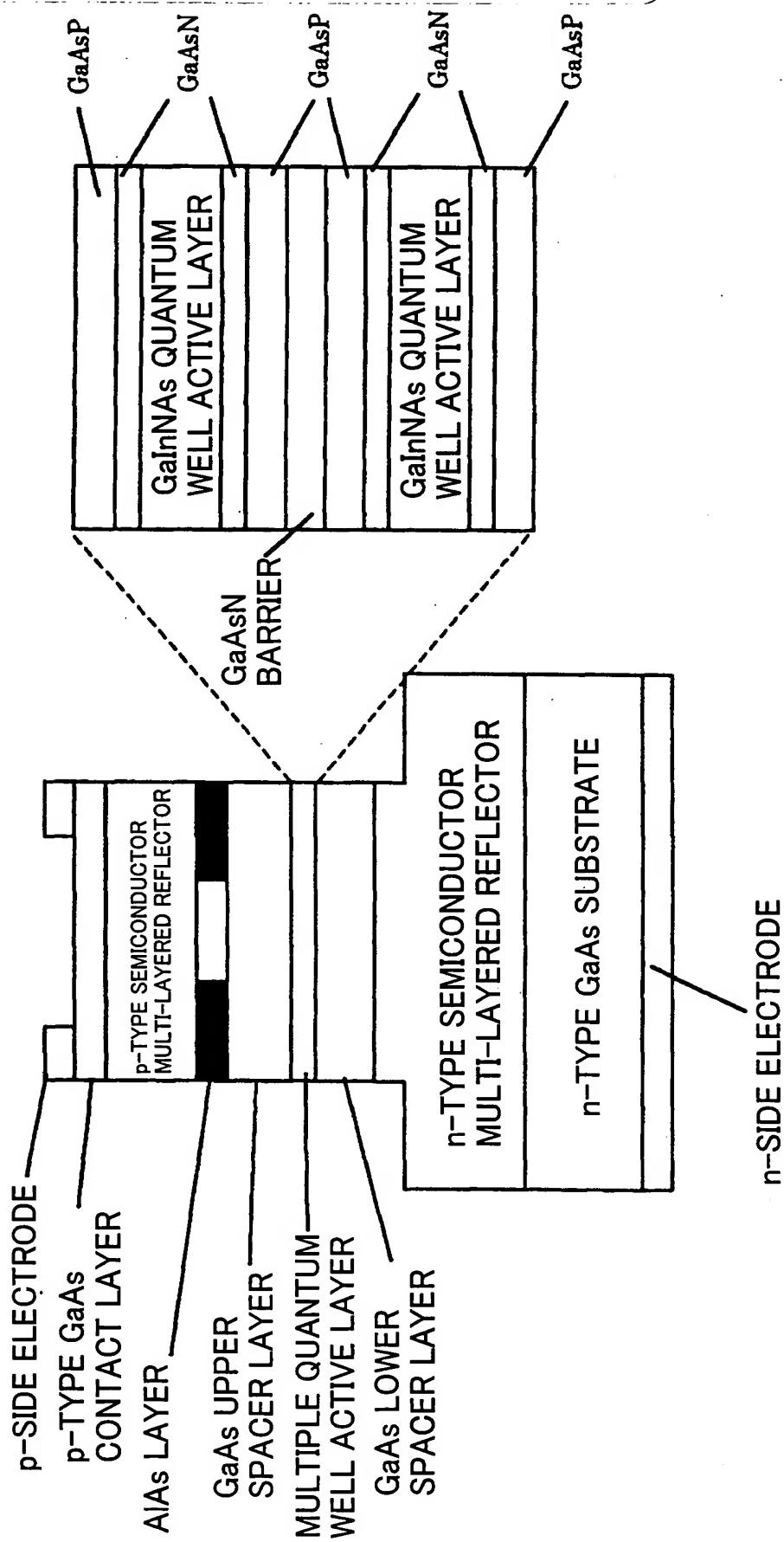


FIG.26

SURFACE EMITTING SEMICONDUCTOR LASER

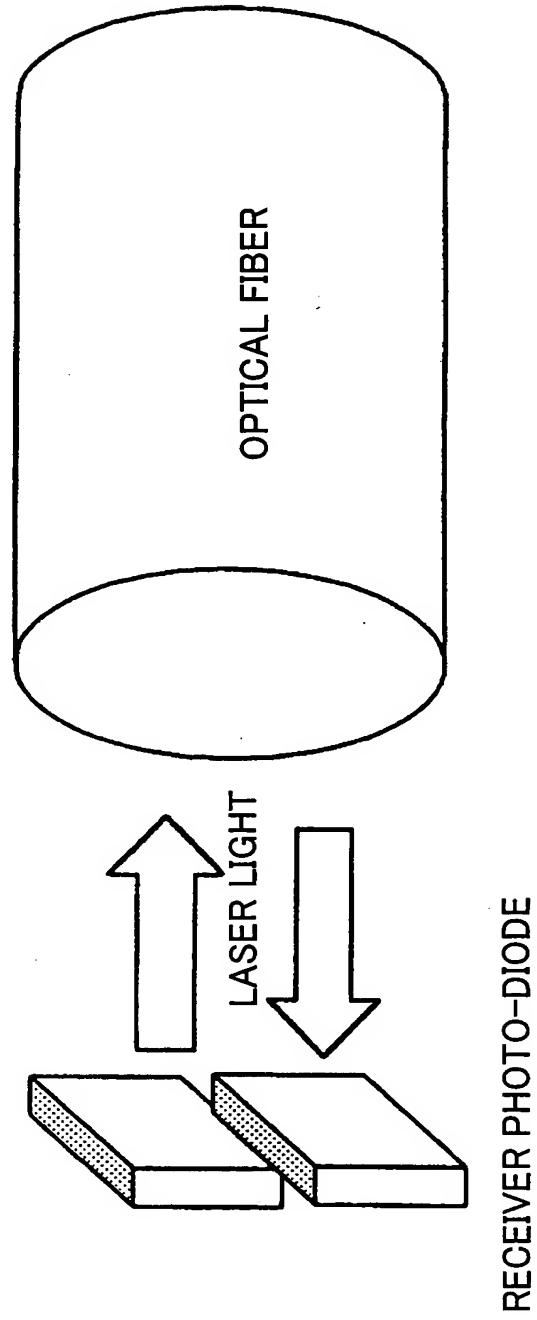


FIG.27B

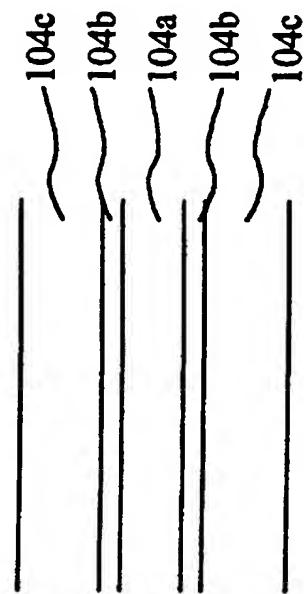


FIG.27A

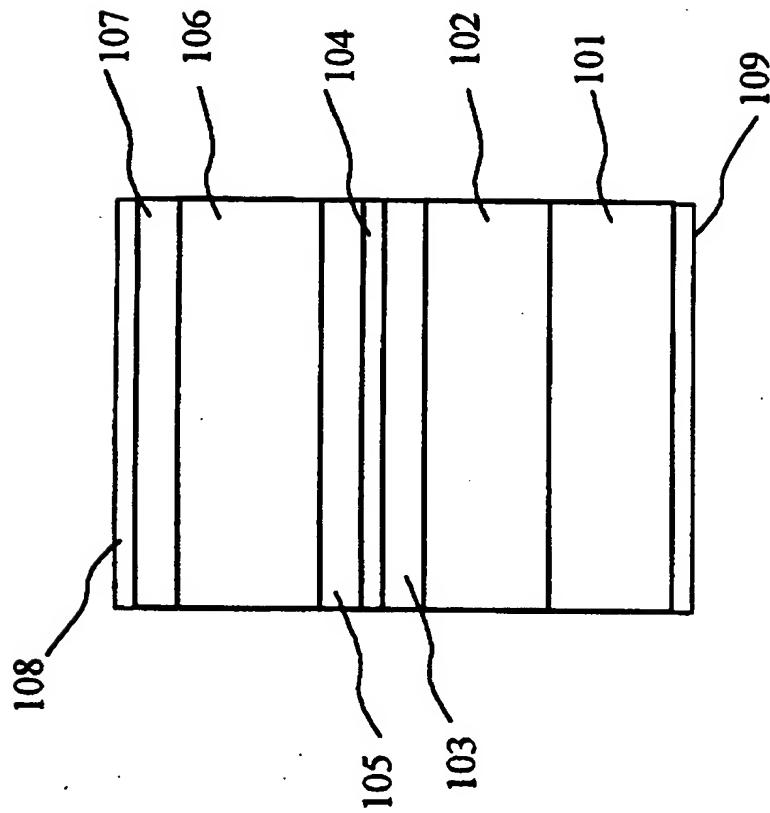
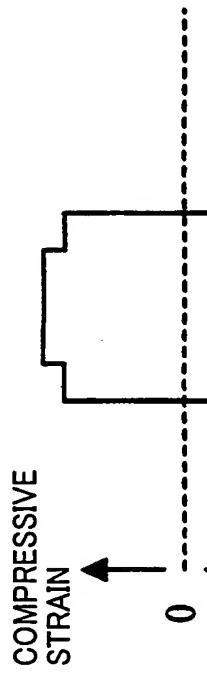
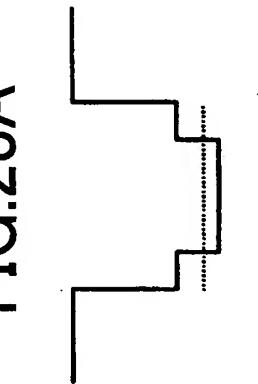
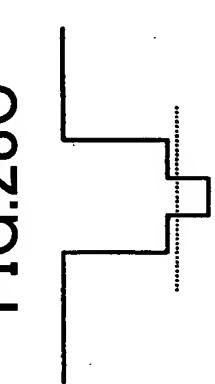
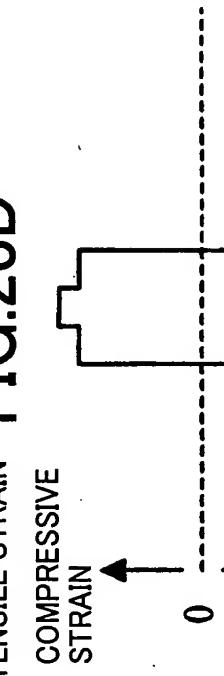
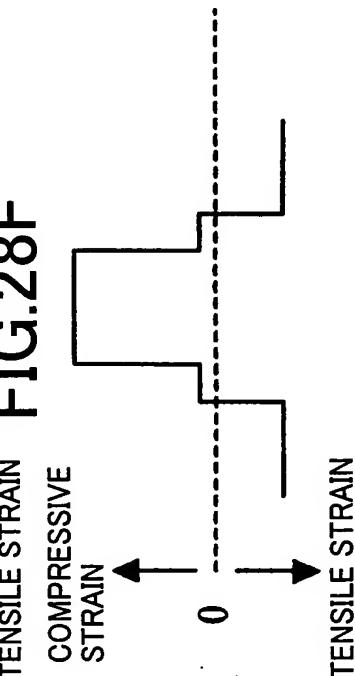


FIG.28B**FIG.28A**

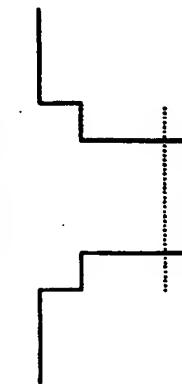
ENERGY POSITION OF BAND
END OF CONDUCTION BAND

FIG.28C

ENERGY POSITION OF BAND
END OF CONDUCTION BAND

FIG.28D**FIG.28F**

ENERGY POSITION OF BAND
END OF CONDUCTION BAND

FIG.28E

TENSILE STRAIN

FIG.29

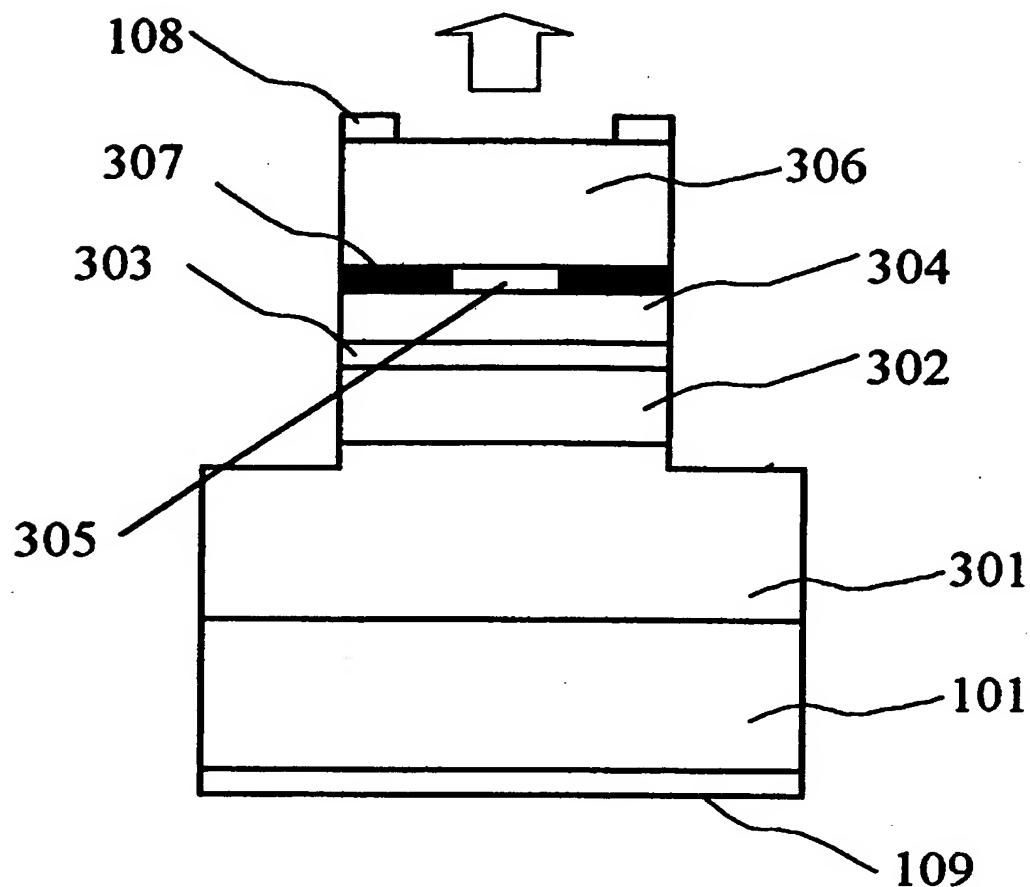


FIG.30A

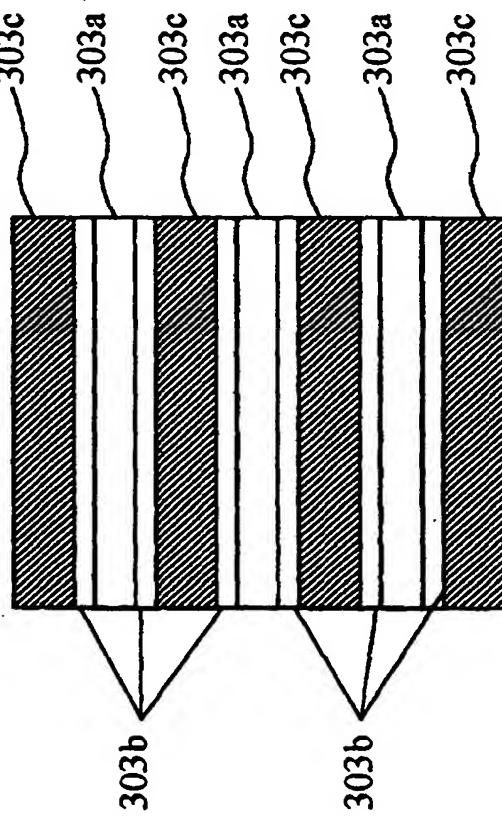


FIG.30B

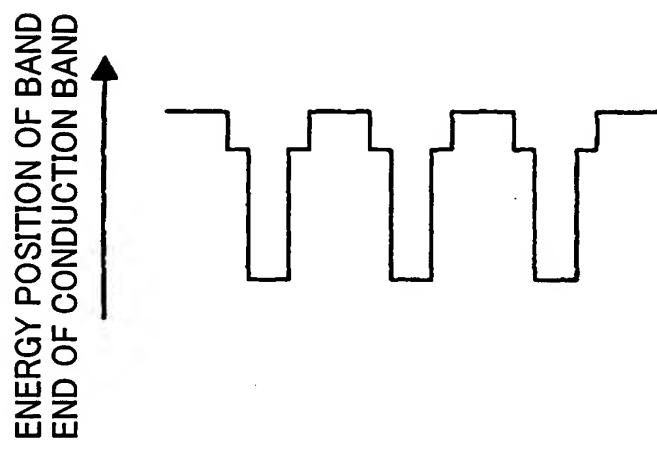


FIG.30C

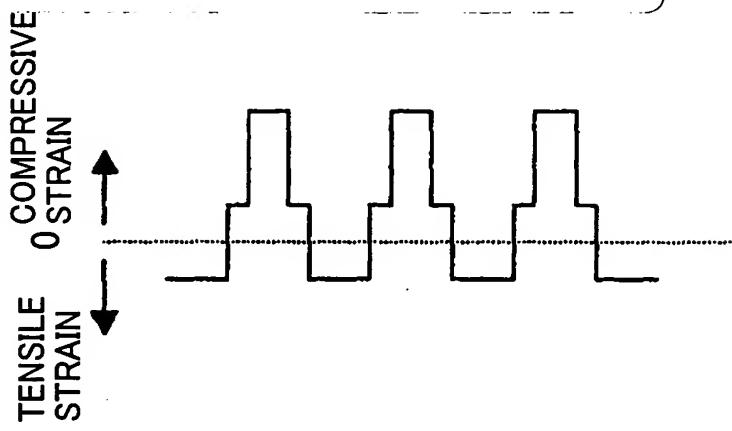


FIG.31A

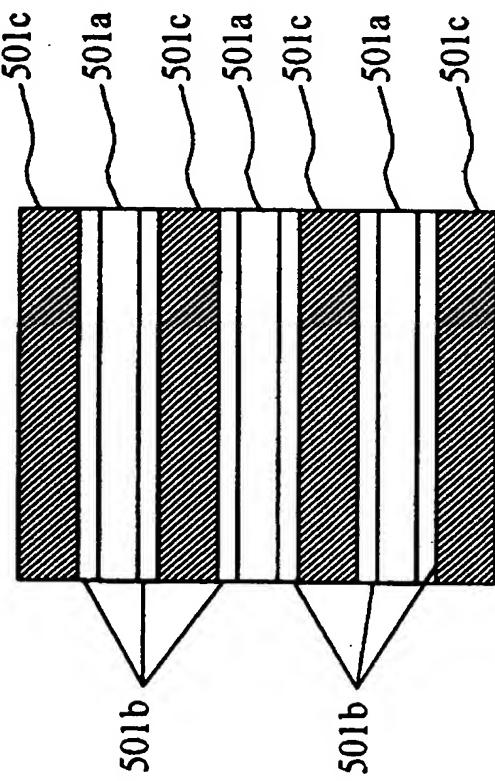


FIG.31B

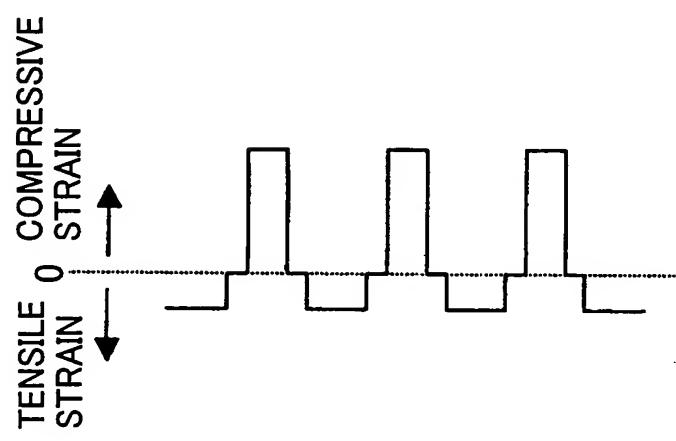


FIG.31C

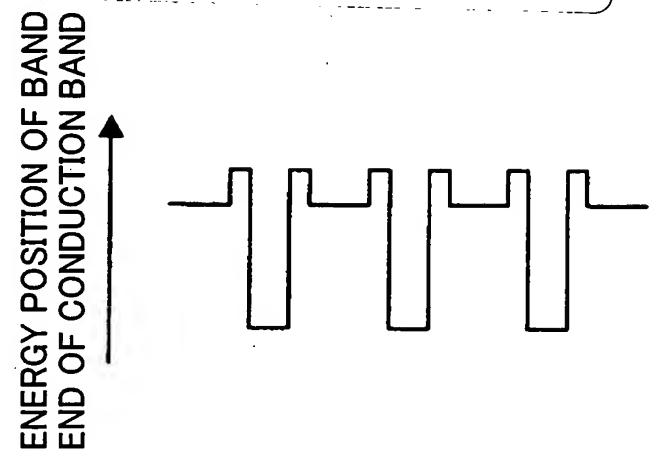


FIG.32A

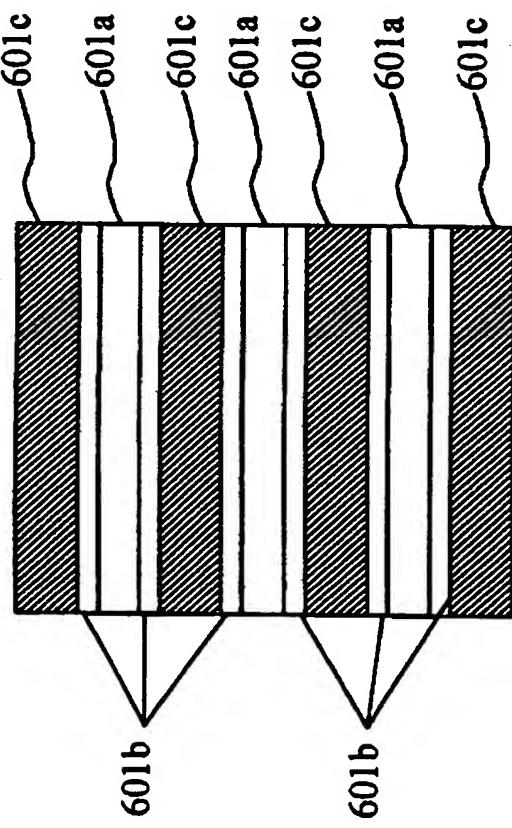


FIG.32B

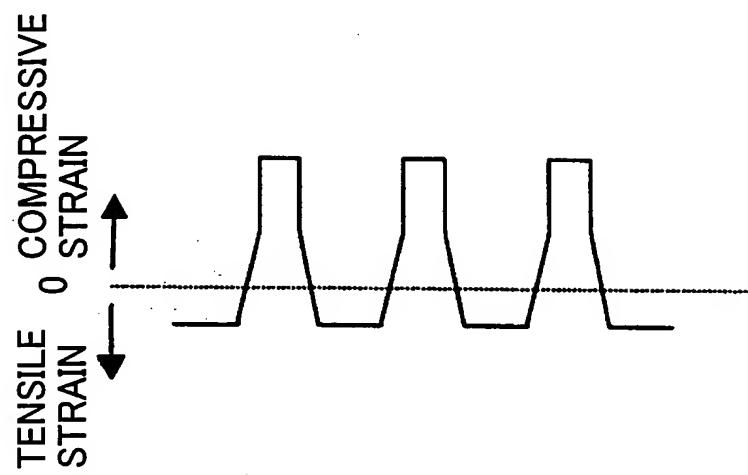


FIG.33

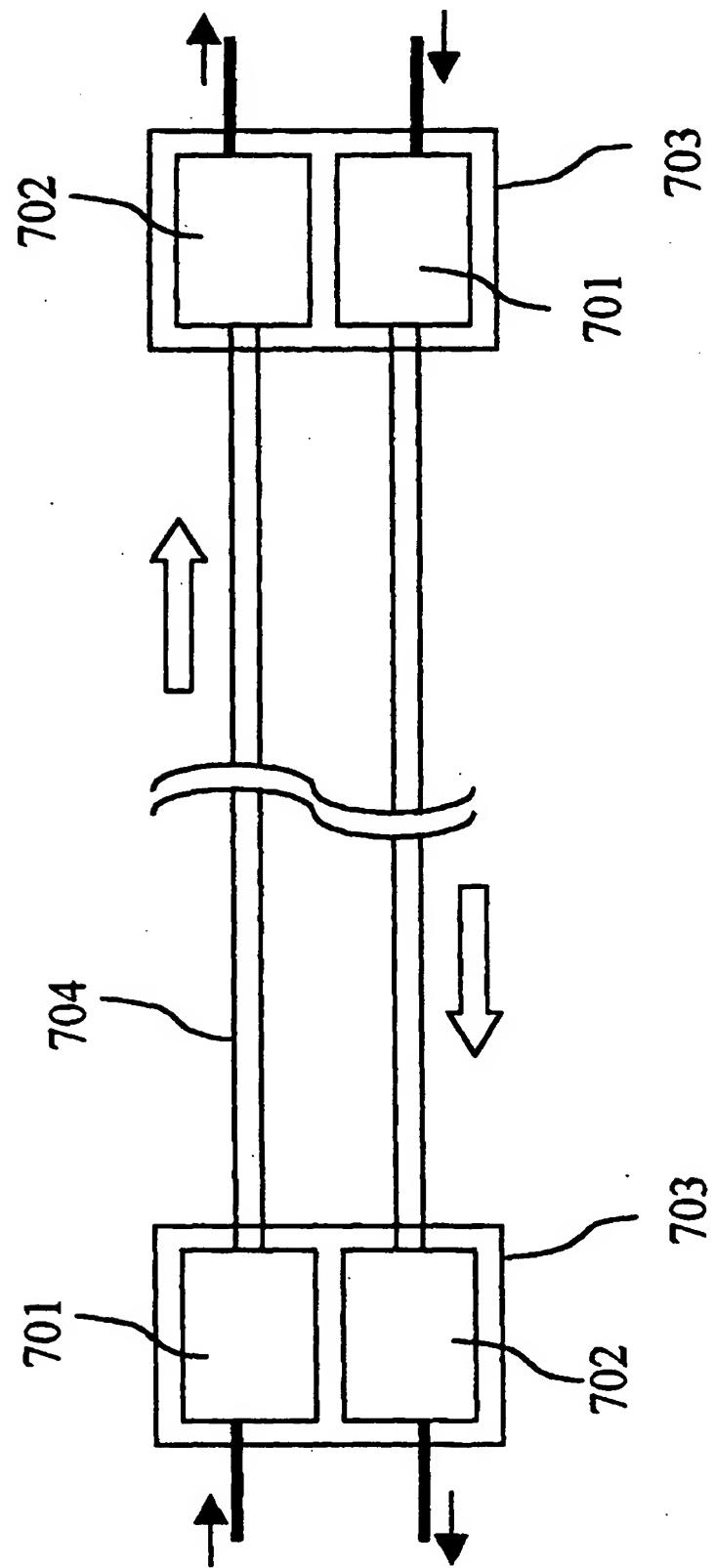


FIG.34

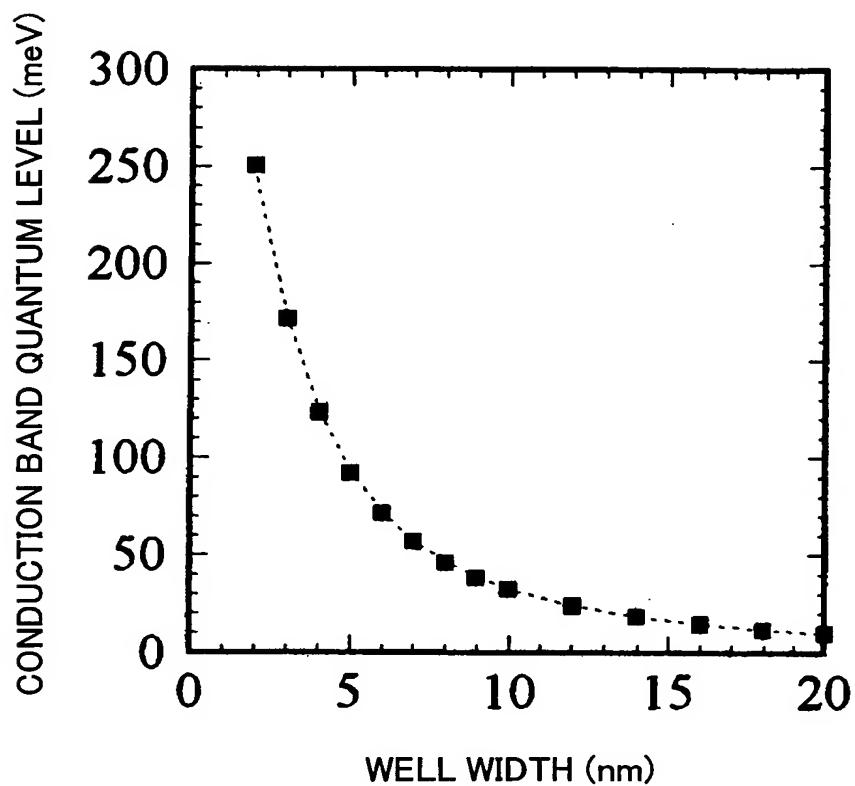


FIG.35

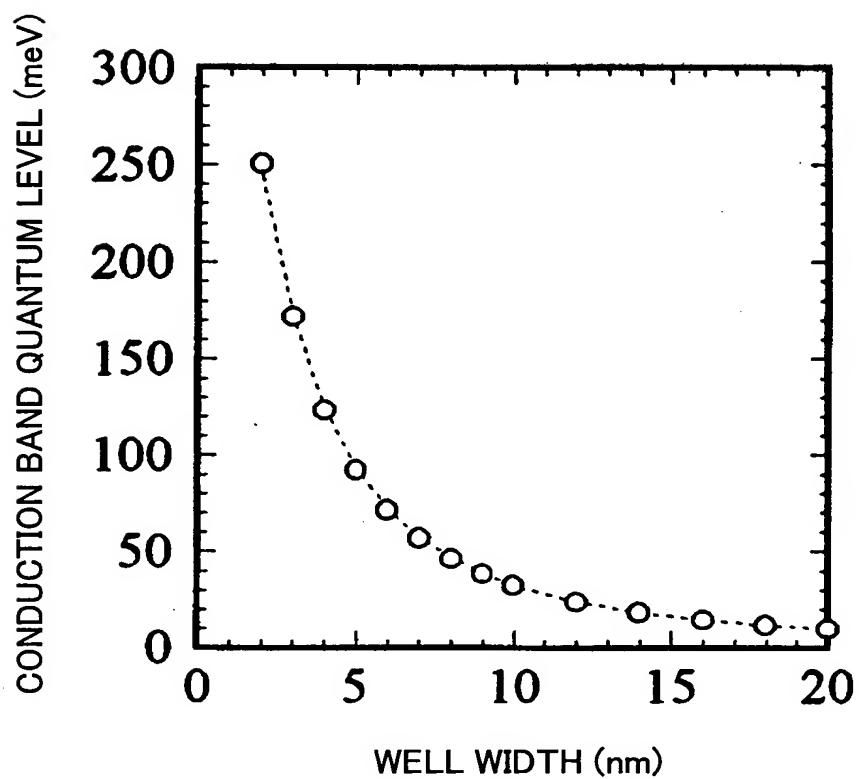


FIG.36

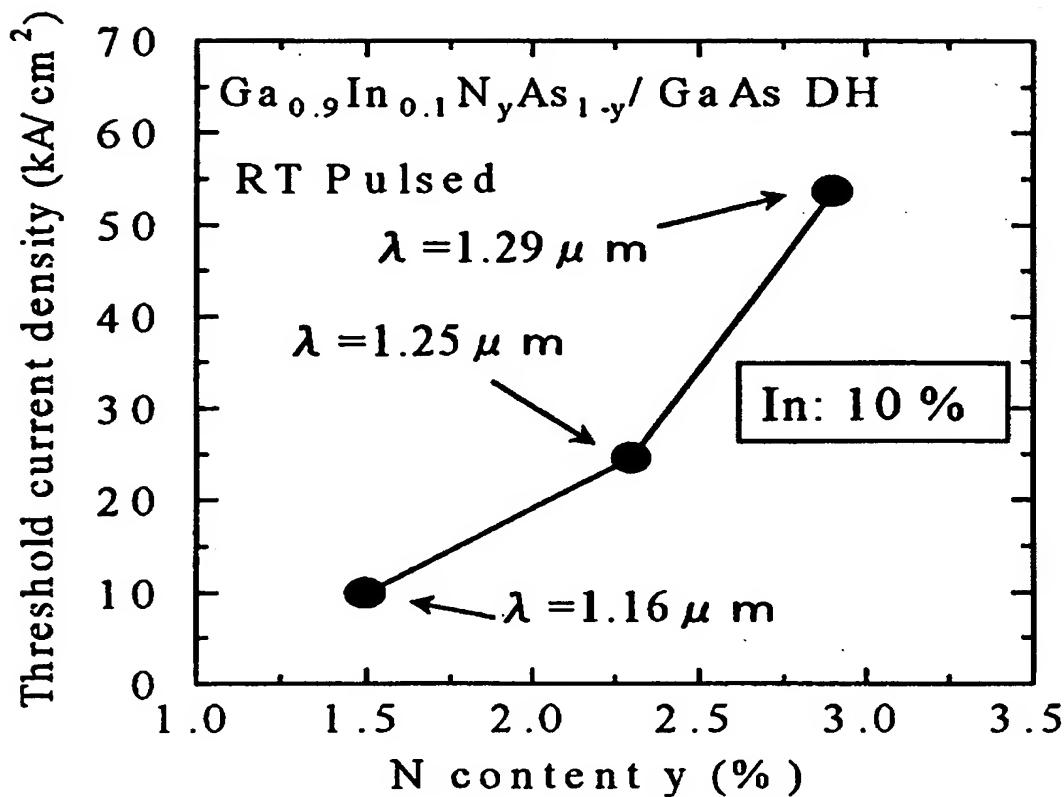


FIG.37

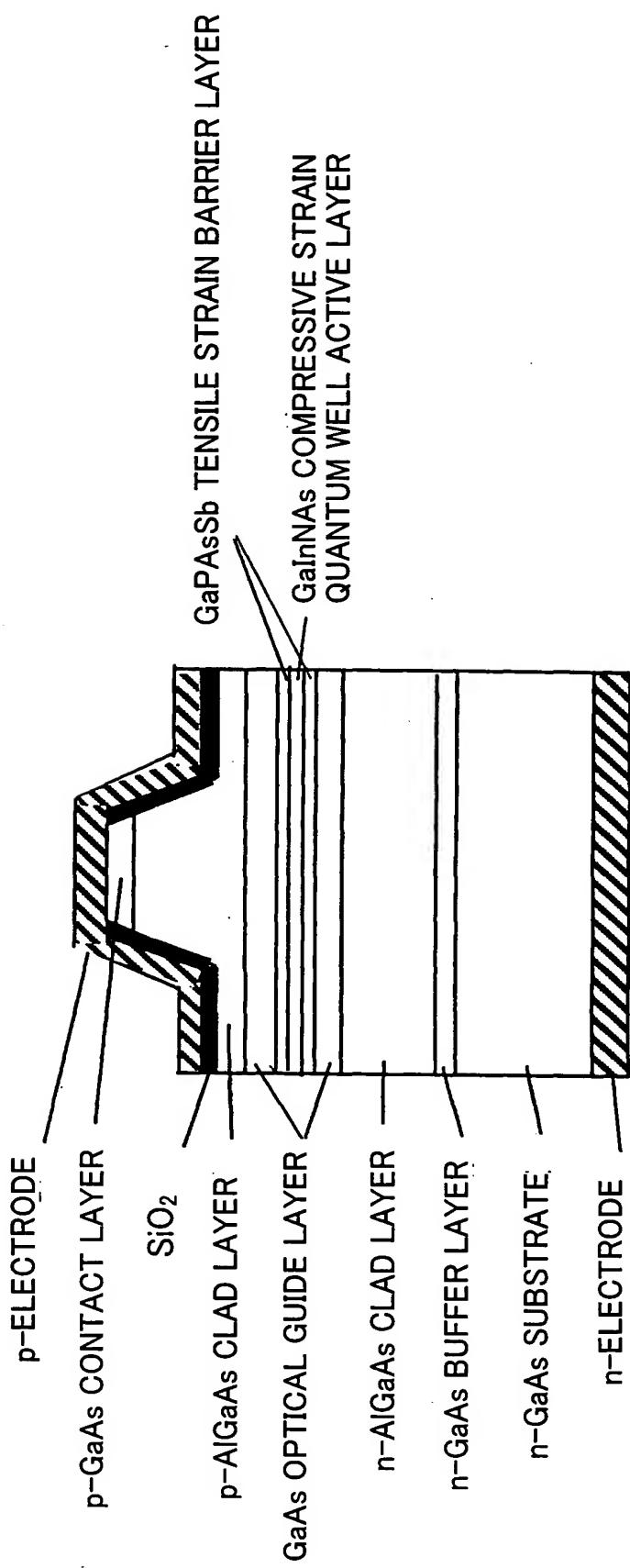


FIG. 38

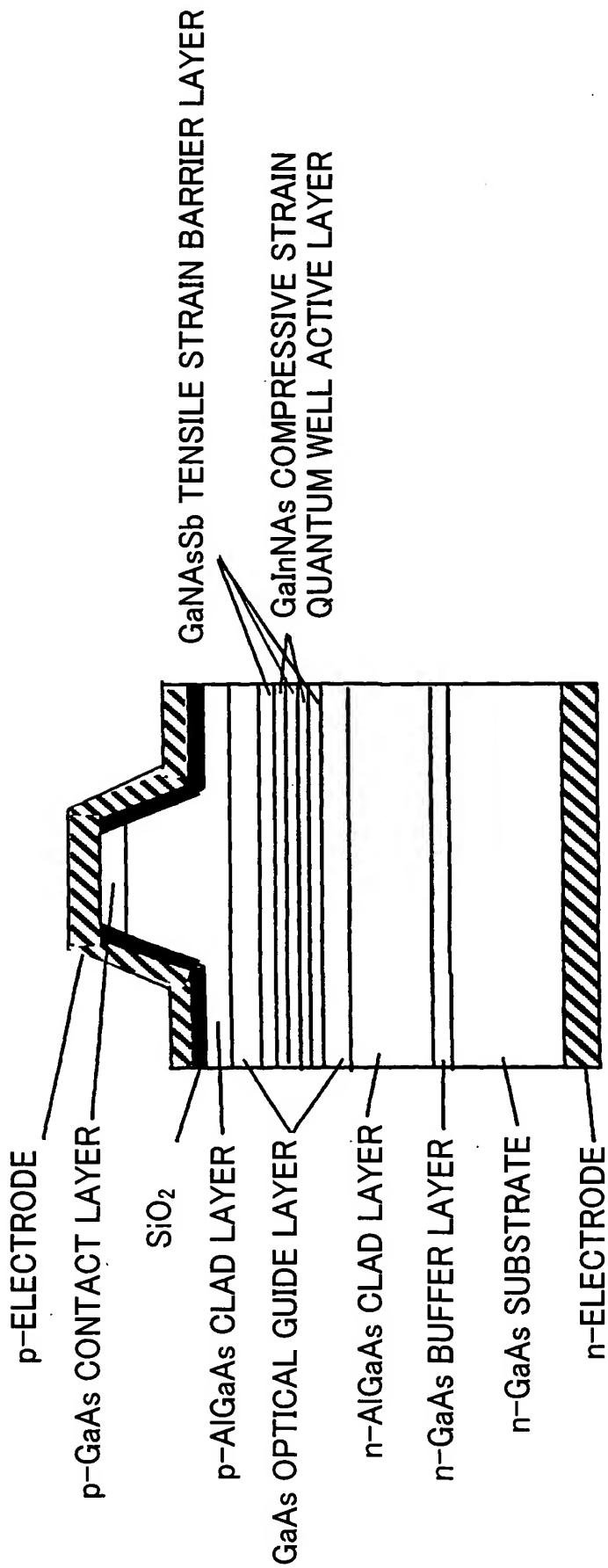


FIG. 39

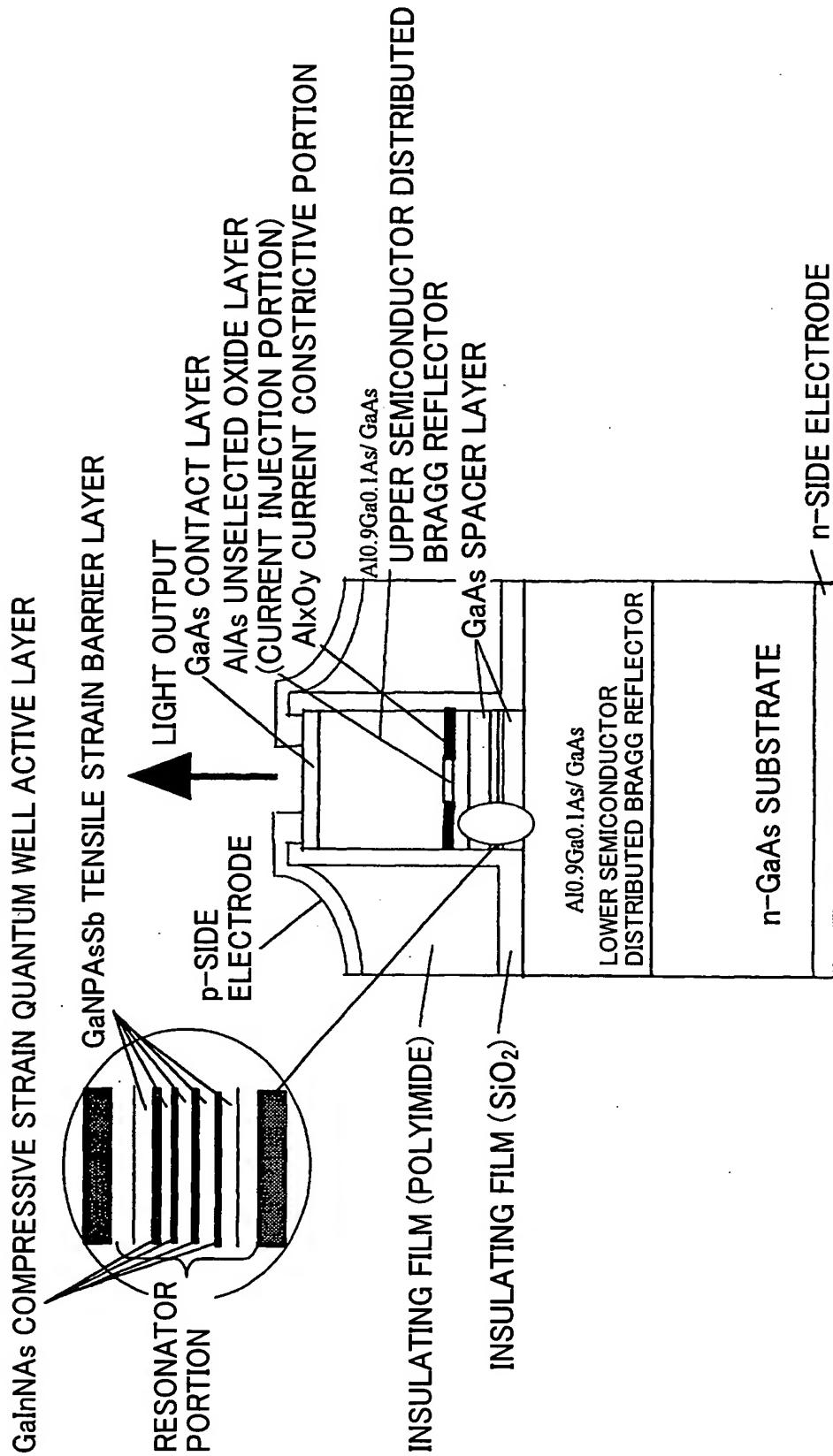


FIG. 40

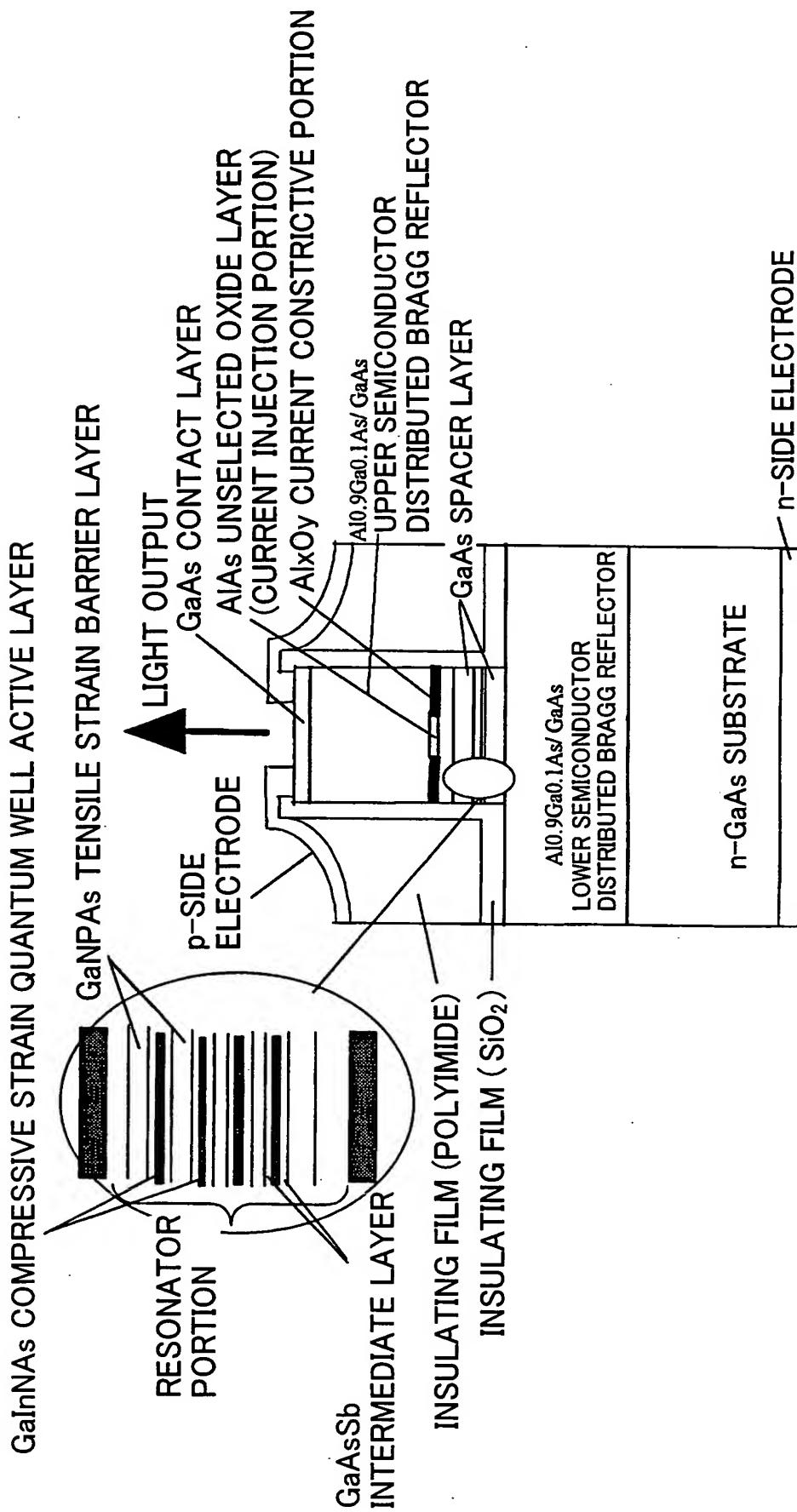


FIG.41

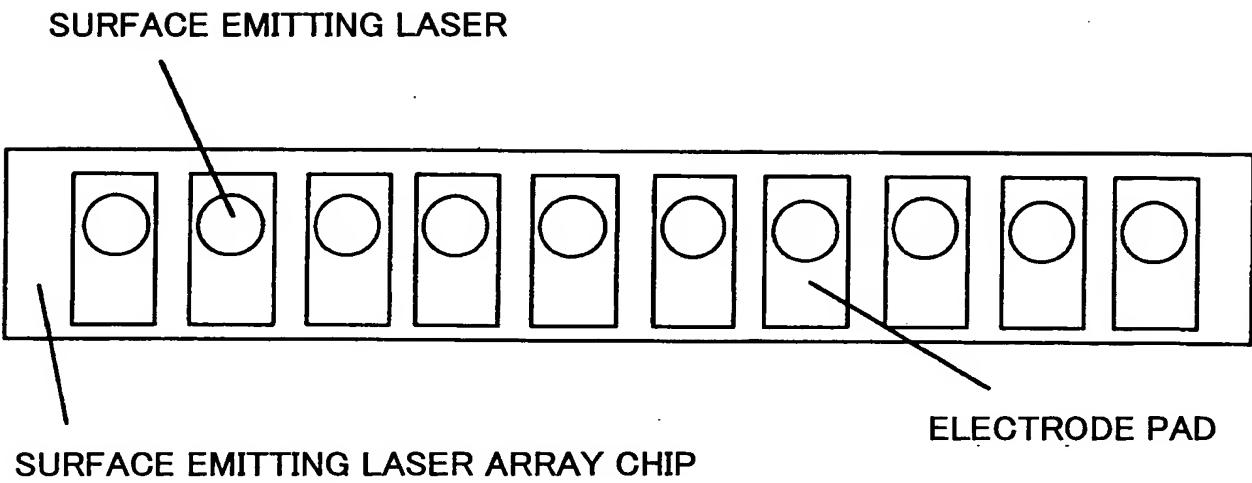


FIG.42

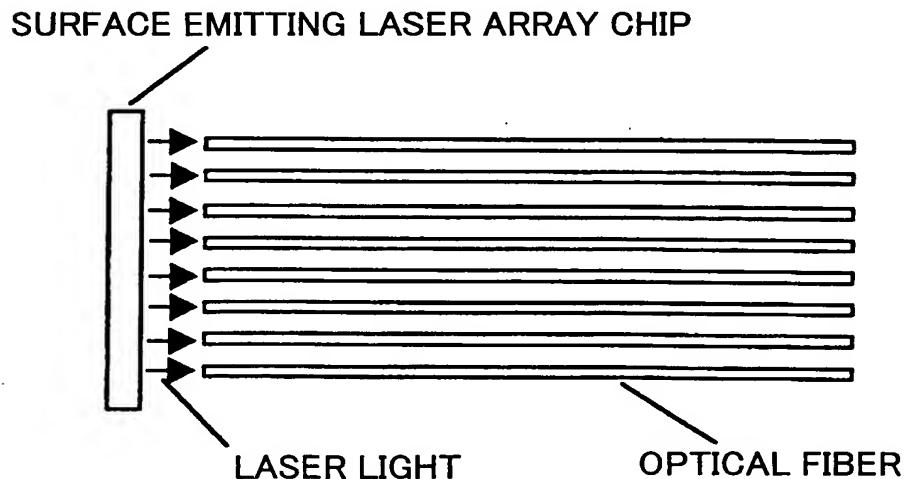


FIG.43

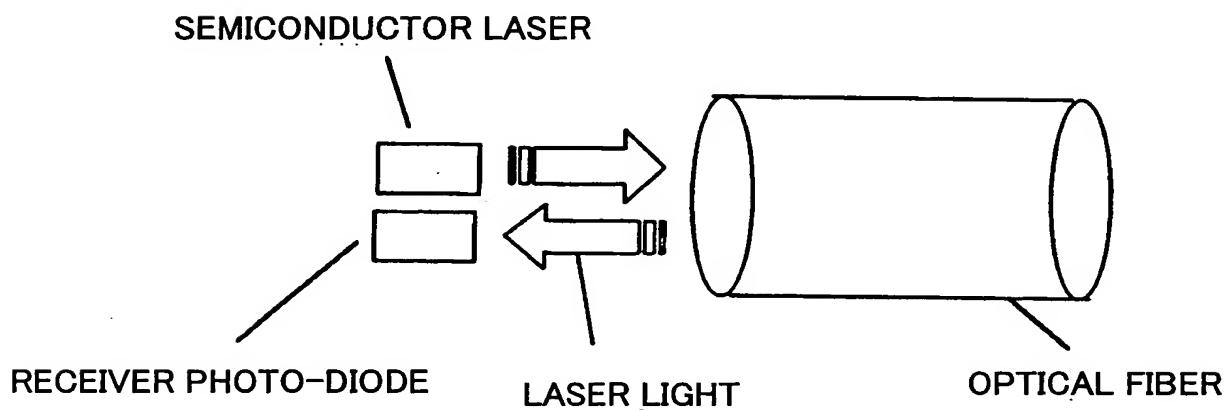


FIG.44

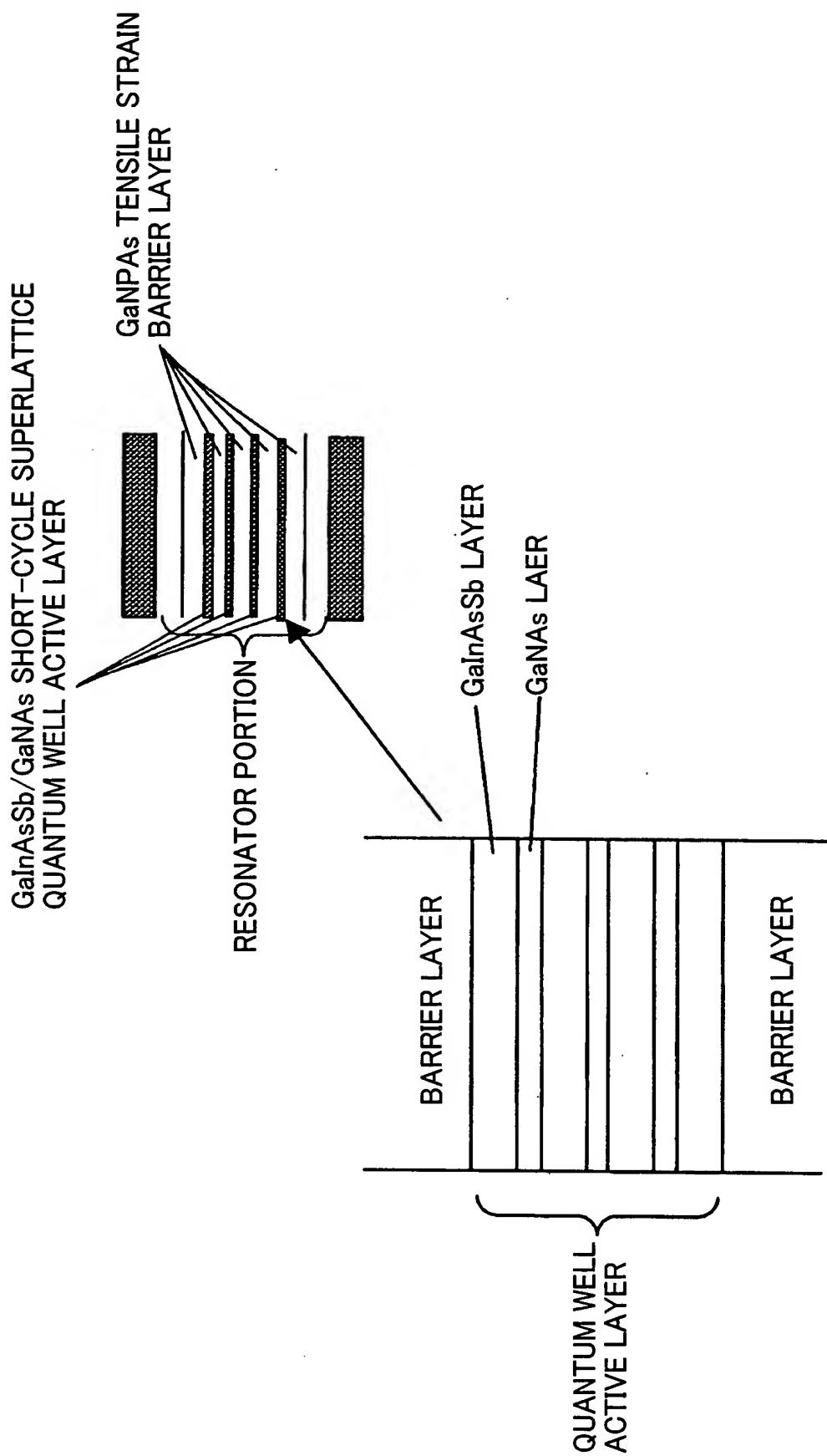


FIG.45

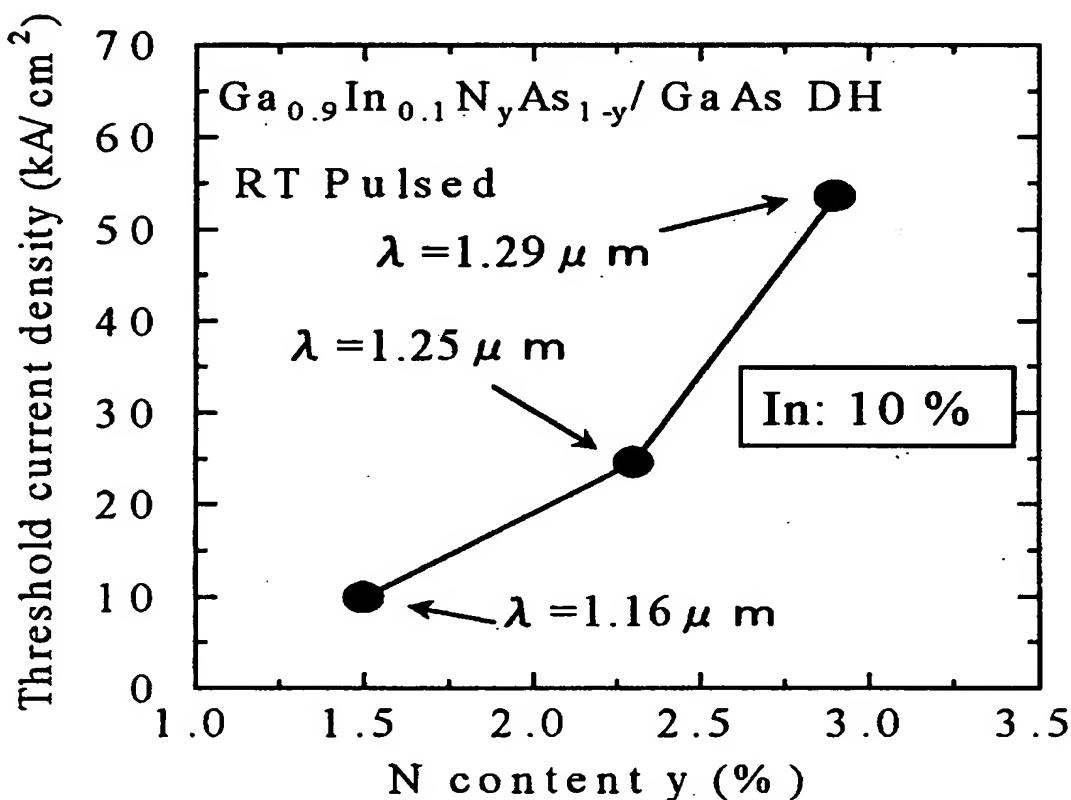


FIG. 46

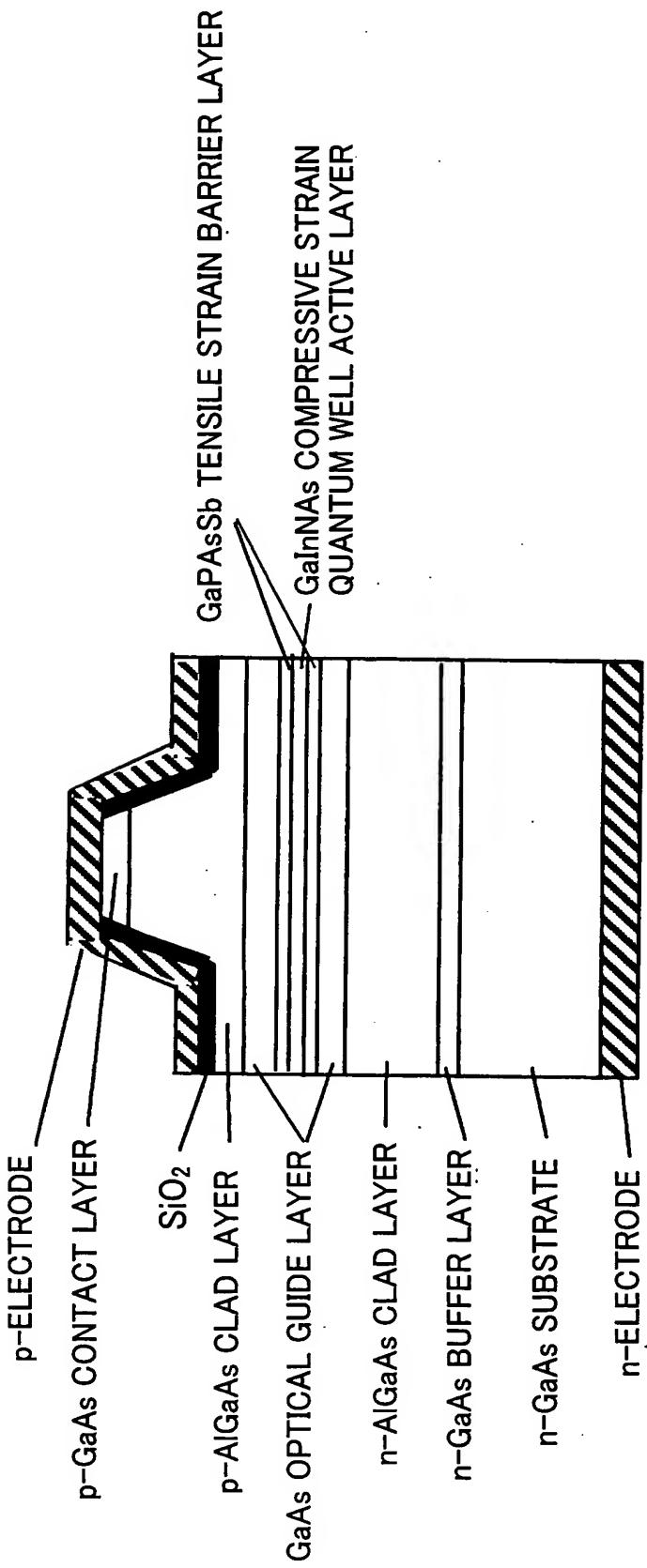


FIG.47

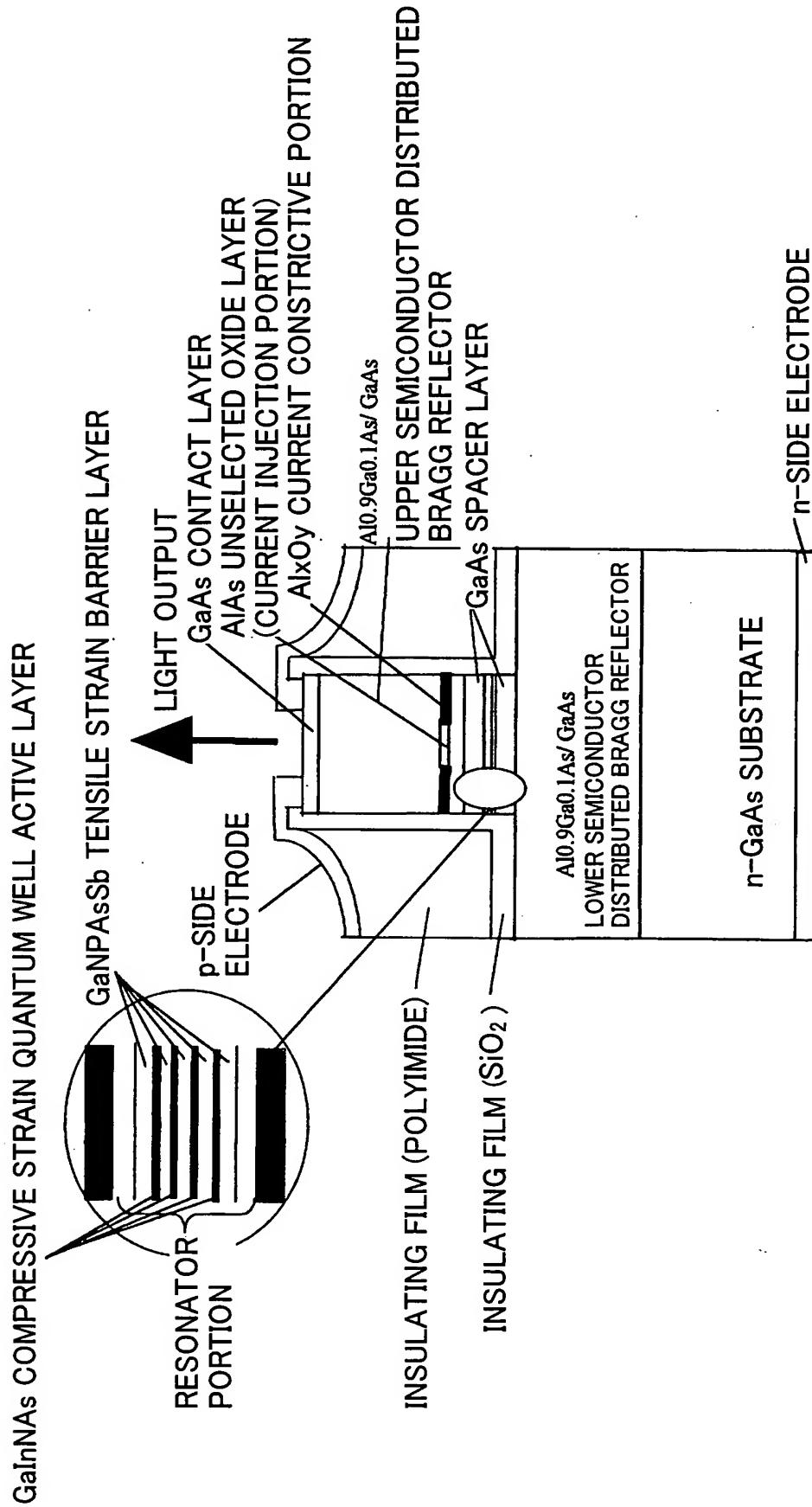


FIG. 48

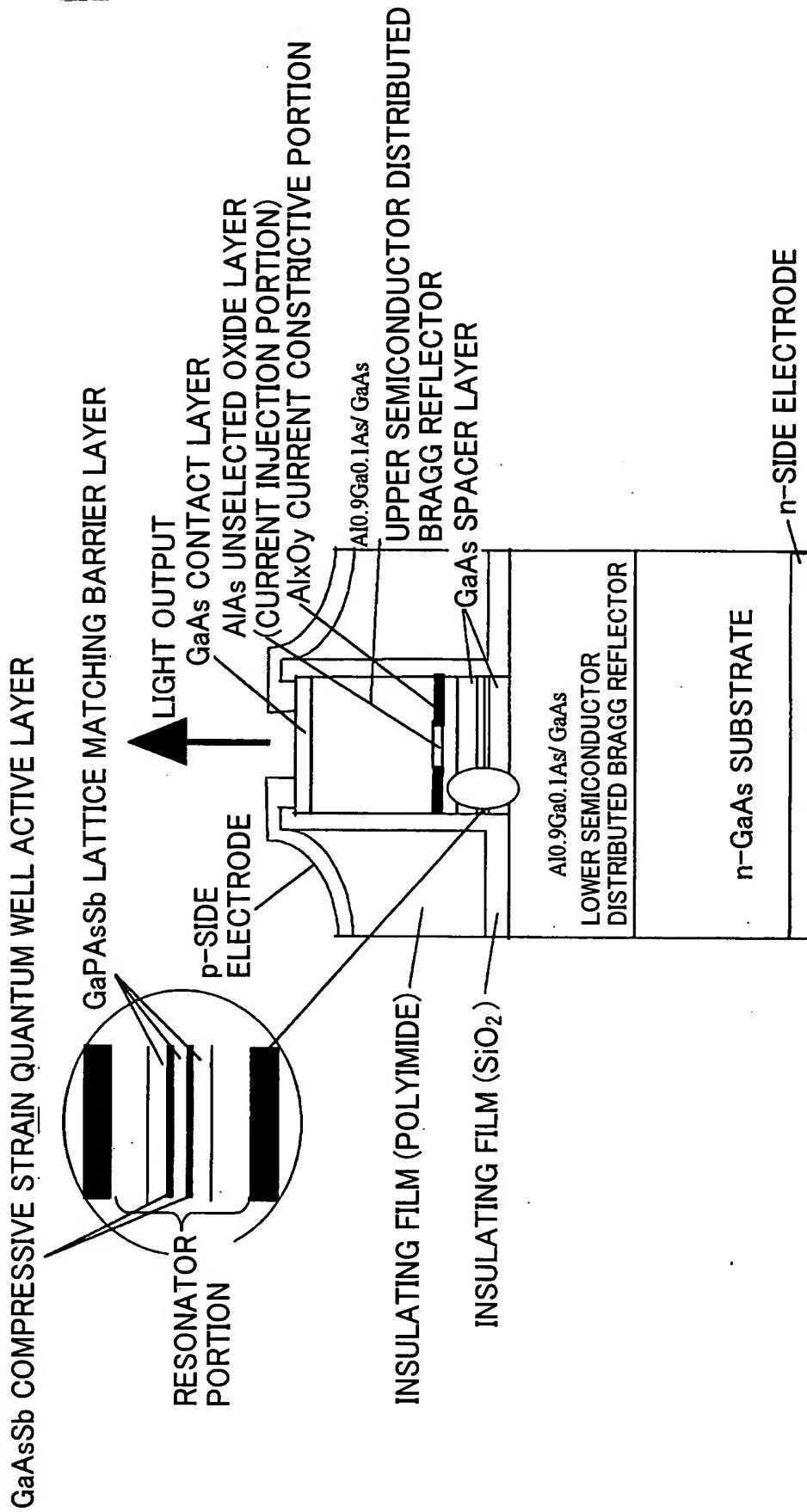


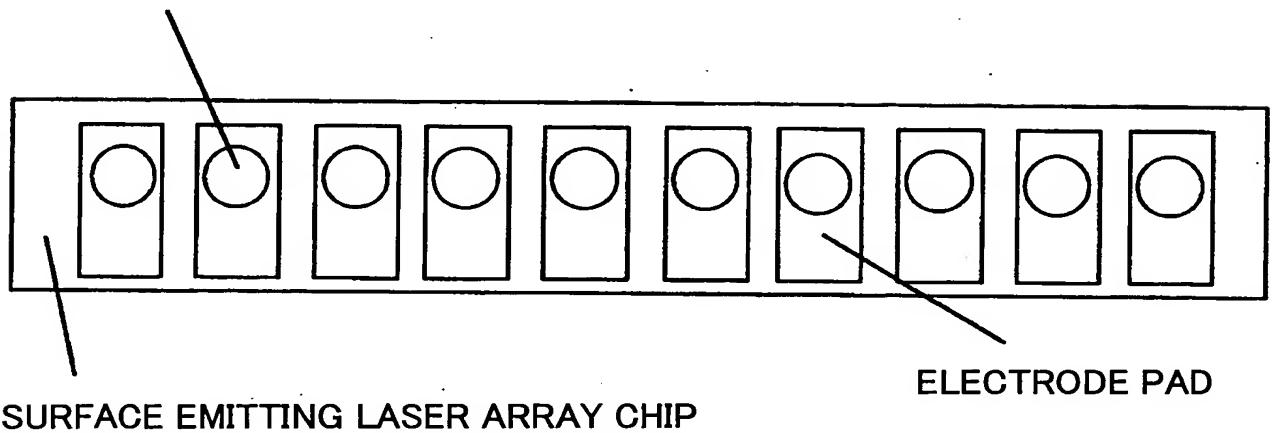
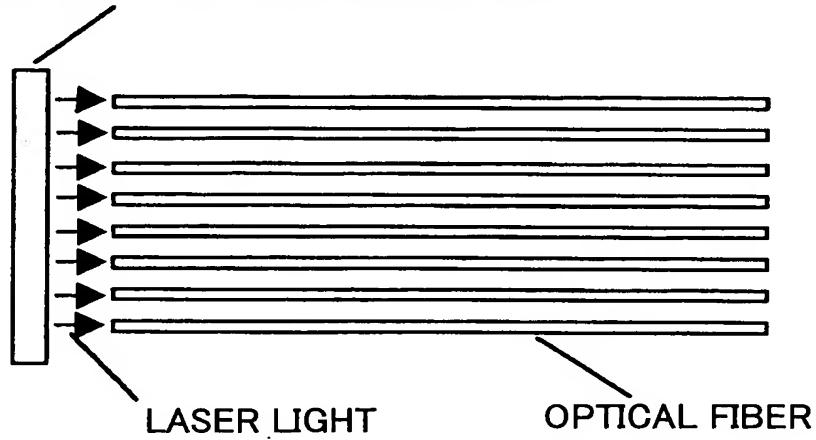
FIG.49**SURFACE EMITTING LASER****SURFACE EMITTING LASER ARRAY CHIP****FIG.50****SURFACE EMITTING LASER ARRAY CHIP**

FIG.51

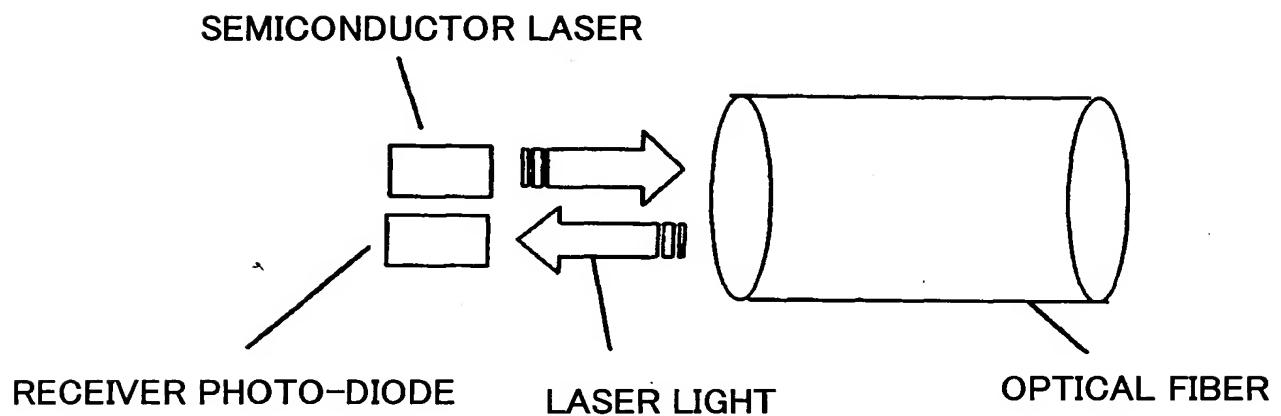


FIG.52

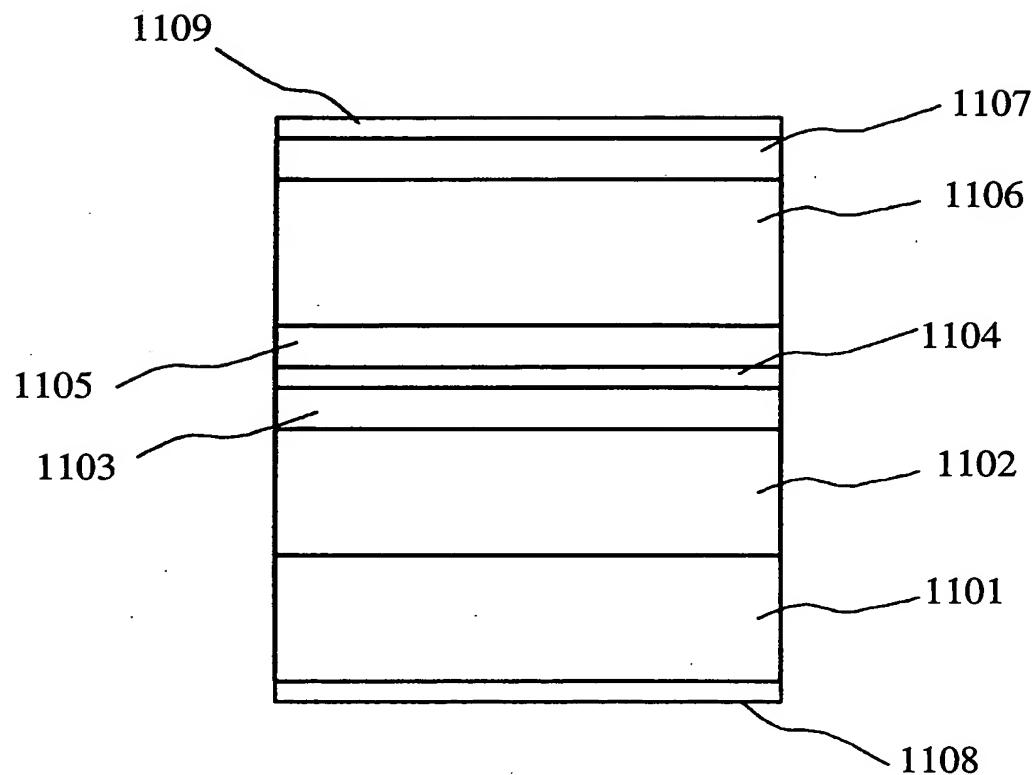


FIG.53

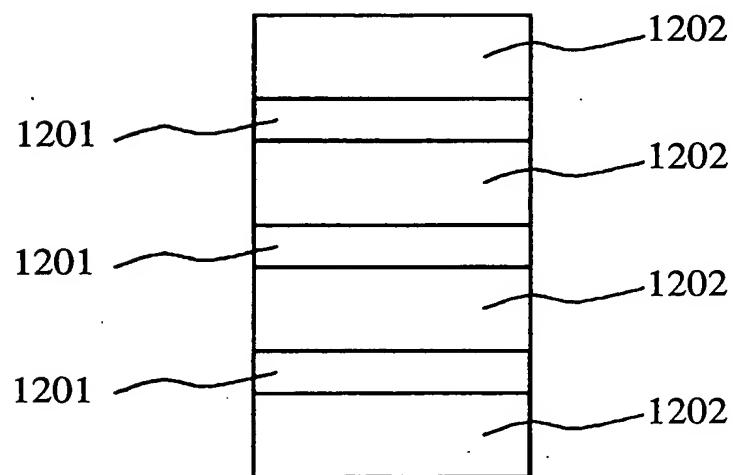


FIG.54

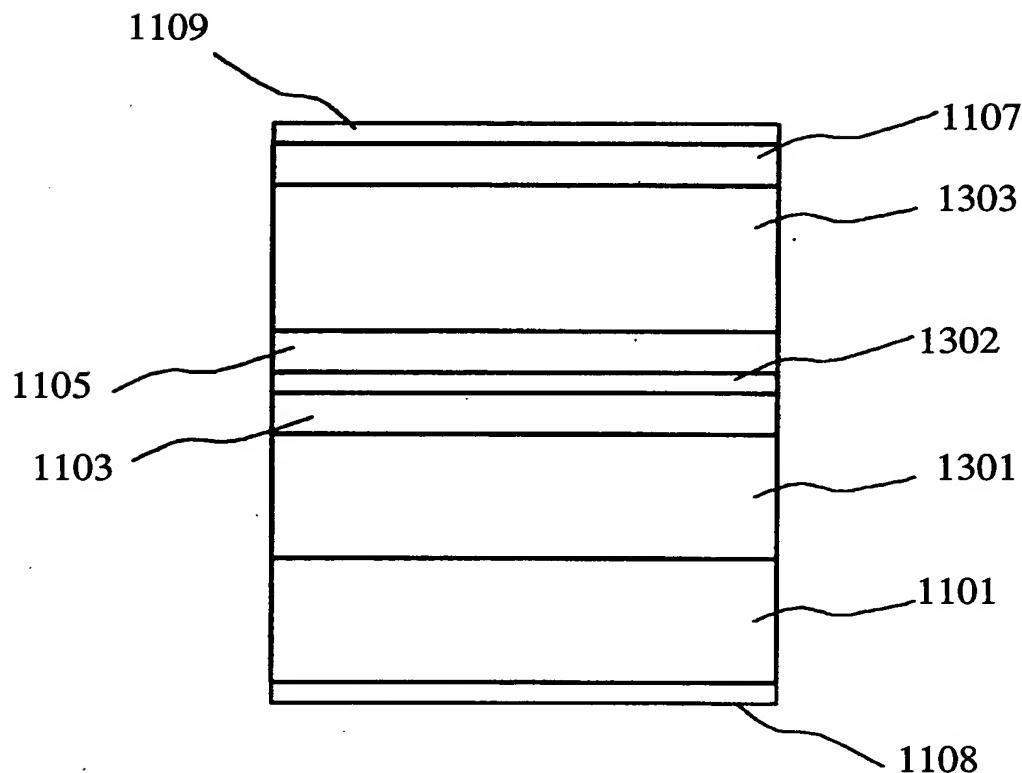


FIG.55

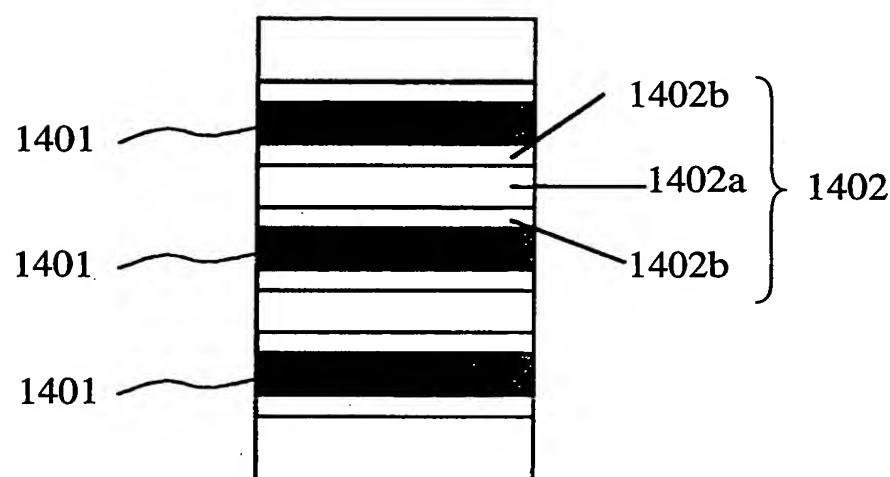


FIG.56

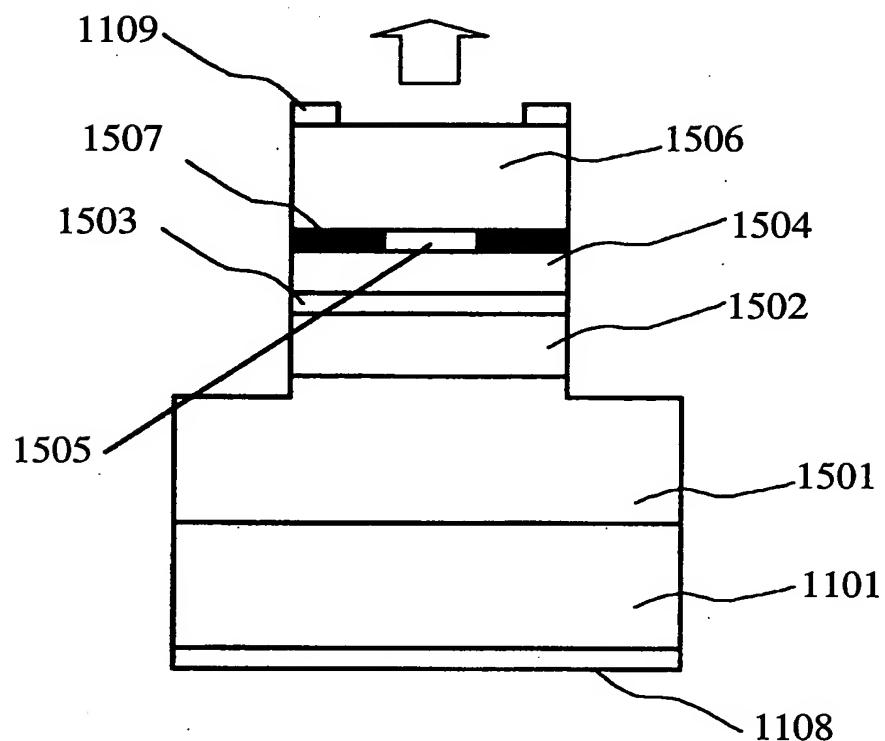


FIG.57

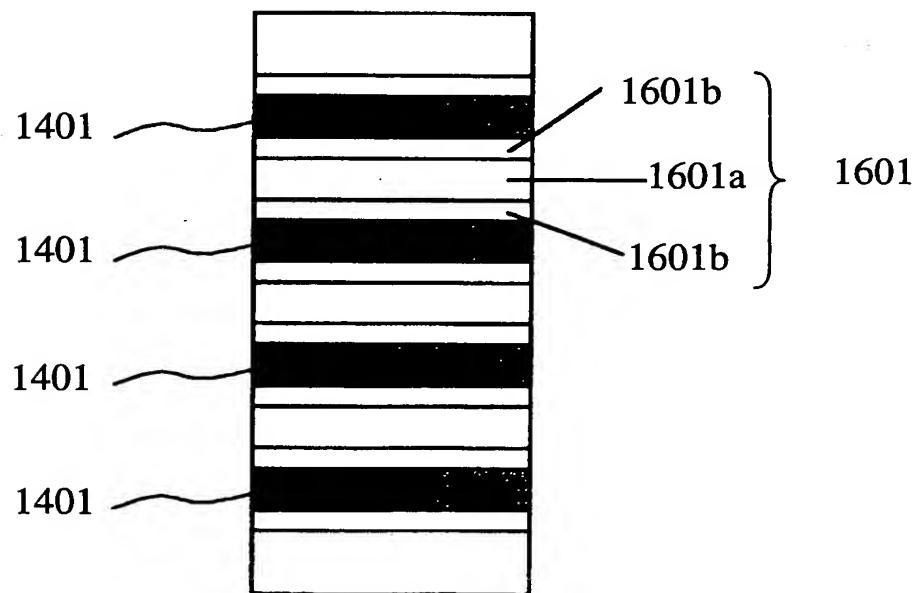


FIG. 58

